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ABSTRACT

This conference proceedings of off-campus library services includes 30 papers covering the following topics: extracting the hidden potential of course syllabi; obstacles to user education for off-campus students; using Hypercard in an off-campus library environment; satisfying accreditation requirements in lean times; the library's role in franchising higher education; costing of off-campus library services; off-campus students' perceptions of the effectiveness of library user education; linking Indiana citizens to libraries; cooperative planning for service and instruction; responding to accreditation associations' concerns about an external degree program; taking the technology to remote classrooms; using technology to provide library services for a branch campus in Europe; distance education and the virtual library; faculty perceptions of off-campus student library needs; developing a library service to distance students in New Zealand; assessing and enhancing off-campus library services in western Kentucky; analysis of staffing patterns and personnel management practices for academic library staff at off-campus locations; the impact of library service to non-resident students; acquisition issues in providing library support for distance learning; statewide resource sharing; off-campus faculty and student perceptions of the library; improving library services at satellite campuses via networking; funding off-campus library services through alternative sources; use of a CD-ROM local area network by remote site students; the Schaffner model of library services; library services for the Open Learning Agency of Australia; barriers to library services to distance learners in Third World countries; using computer-mediated conferencing to create a community of researchers and writers; use of job aids for bibliographic instruction; and implementing a virtual library for off-campus students. (DLS)

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THE SIXTH OFF-CAMPUS LIBRARY SERVICES CONFERENCE PROCEEDINGS

OCTOBER 6-8, 1993
KANSAS CITY, MISSOURI

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THE SIXTH OFF-CAMPUS LIBRARY SERVICES

CONFERENCE PROCEEDINGS

KANSAS CITY, MISSOURI
OCTOBER 6 - 8, 1993

COMPILED BY
CAROL J. JACOB

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PREFACE

The Off-Campus Library Services Conference held in Kansas City, Missouri was the sixth such conference sponsored by Central Michigan Unviersity Libraries and the Extended Degree Programs.

Since 1982 when the first conference was held, Off-Campus Library Services Conferences have provided a forum where practitioners involved with library services for off-campus constituents could gather to exchange relevant ideas, concerns, and perspectives; and to share research. Topics included the use of technology, faculty perceptions, accreditation issues, external relations/networks, library user education, academic support, the virtual library, acquisitions, program start-up, international program management, and fee-based service.

All papers included in the Conference Proceedings were selected through a juried abstracts process involving Program Advisory Board members. The papers appearing in the Proceedings were accepted as received from their authors. No editing was done for content or writing style. The papers were, however, reformatted using the *Chicago Manual of Sytle, Thirteenth Edition* to achieve a consistency of presentation.

It is the belief of all those involved with the Sixth Off-Campus Library Services Conference that this edition of the Conference Proceedings will become a significant part of the growing body of literature in the field of off-campus library services.

Carol J. Jacob
October 6, 1993

ACKNOWLEDGMENTS

A great amount of hard work and long hours have gone into the production of the *Sixth Off-Campus Library Services Conference Proceedings* and there are many people who deserve recognition for the contributions they made to this project.

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Special acknowledgements for the contribution made by Jennifer Margrif in bringing together the myriad of details that made 31 different papers a unified publication.

And to the staff of Off-Campus Library Services, the Central Michigan University Libraries, and the CMU Extended Degree Programs directly and indirectly contributed their time, guidance and support to the publication of the *Sixth Off-Campus Library Services Conference Proceedings*.

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Course Syllabi: Extracting Their Hidden Potential

Rick Bean and Lynn M. Klekowski
DePaul University

Librarians are continually exploring ways to obtain information that will assist them in implementing new services and/or improving existing services. Extended campus librarians are no exception. The structure and operation of their facilities can serve as the perfect setting for experimenting with new and innovative services. One attempt to address this issue was a syllabus study conducted at DePaul University's Suburban Campus Libraries.

DePaul's Suburban Campus Libraries are the ideal setting for this type of study. The limited number of classrooms at each suburban campus made the study easier to conduct; there are 14 classrooms at the Oak Brook Campus and 13 classrooms at the O'Hare Campus. Further, fewer than 80 classes occurred at each site during each quarter; significantly fewer classes occurred during the summer quarter when compared with the fall, winter, and spring quarters. These two characteristics allowed the study to be conducted within the normal workflow of each librarian without requiring extra time and effort.

This paper will include a review of the literature, a discussion of objectives, and an examination of the procedures and forms created for the two-year study. The paper will conclude with a review of the syllabus study's results.

LITERATURE REVIEW

A review of the literature indicates that very little has been written on the topic of syllabus study. The authors of this paper used the terms "syllabi," "syllabus," and "course descriptions" while searching *Library Literature, LISA* (Library and Information Science Abstracts), *ERIC, CARL UnCover, Library Services for Off-Campus and Distance Education: An Annotated Bibliography* (Latham, Slade, and Budnick 1991), and the proceedings from the first five Off-Campus Library Services Conferences (Lessin 1983, 1986, 1987, 1989, Jacob 1991).

A 1982 article by Linda K. Rambler proved to be the most valuable for the DePaul Suburban Campus Libraries' purposes. In this article, the author describes a syllabus study conducted at a large university with a student population of over 32,500. As the DePaul librarians were eager to improve and/or expand their services at the Suburban Campus Libraries, they agreed to conduct a syllabus and/or expand their services at the Suburban Campus Libraries, they agreed to conduct a syllabus study to identify planned library use as well as to identify areas for development of library services.

OBJECTIVES OF THE STUDY

The first step in the syllabus study process was to create a definition and set of objectives that participating Suburban Campus librarians would follow. This was a critical aspect of the process as it included the discussion necessary for Suburban Campus librarians conducting the study to emotionally and intellectually invest their time in the process and work of analyzing syllabi. The librarians needed to conduct the study with the same understanding of its concepts and processes. Once the definition and objectives were identified and agreed upon, the librarians were confident that the study would be conducted as consistently as possible.

The DePaul Suburban Campus librarians adopted Rambler's explanation of why a syllabus study would be useful. It is as follows:

> ". . . the results of the [syllabus] study will offer library managers a concrete appraisal of which subject areas, course levels, and specific courses make planned use of library resources." (Rambler, 1982)

The most important element in Rambler's explanation was the term "concrete appraisal." Librarians analyzed and evaluated the text of each syllabus against a checklist of possible "categories of library use." Each syllabus was concurrently reviewed for mention of a method of library use not previously identified by the librarians (Appendix 1). This evaluation of syllabi was structured to be as objective as possible.

The librarians also created three objectives for the syllabus study. The first was to use the study to anticipate library-use needs in a particular course. Too often, in academic libraries, specific resources necessary to complete a class assignment only become apparent (to library staff) when they cannot be located or when the reference desk is besieged by a number of students asking for the same resource(s). If library staff could anticipate this need, it could be addressed in an organized fashion.

A second objective of the study was to more efficiently prepare for a bibliographic instruction session. A librarian would be able to create a unique and more effective bibliographic instruction session if knowledge of the course requirements and assignments was available prior to doing the session.

The final objective of the study was to assist in curriculum development. The intent was to identify course(s) within the curriculum in which exposure to library services and resources would be useful and to work with the appropriate faculty member to incorporate library use into their course(s).

Once the definition and objectives of the syllabus study were determined, the Suburban Campus librarians created the process and materials that would be used to conduct the study. As with the definition and objectives, this was a group effort requiring time and discourse.

METHODOLOGY

The methodology of the syllabus study was as follows:

- Collect syllabi from the faculty the first week of each quarter.
- Analyze the syllabi for library use using the Syllabus Study Analysis Sheet (Appendix 2).
- Suggest action to take regarding the library use mentioned in the syllabus (during the second week of the term). Note results on the Syllabus Study Analysis Sheet.
- Analyze and compile data at the end of each quarter, for each campus.
- Identify patterns or conclusions for analysis.
- Share conclusions and patterns with library administration and faculty, if appropriate.

The methodology of this study differed from the study described in the Rambler (1982) article. The DePaul Suburban Campus librarians noted and counted the number of times "a category of library use" was mentioned in a syllabus. They did not judge the use to be "much, some, or none" as was done in the Rambler study. The Suburban Campus librarians felt that quantifying library use using this scale was too subjective for their study.

One staff librarian was responsible for compiling the individual Syllabus Study Analysis Sheets each quarter. Tables identifying library use by campus, curriculum, and library-use format were prepared at the end of each quarter. Compilations were also prepared for each year of the study as well as for the two years combined.

RESULTS

During the two years of the syllabus study, the DePaul Suburban Campus librarians analyzed 77% of the syllabi distributed in classes at the Suburban Campus Libraries; there were 843 classes from which 649 syllabi were collected. When the two-year totals for each of the 10 "library-use" categories were examined, the "research paper/report/project" category was mentioned most frequently (289 times). The "reserve material" category was mentioned least frequently (29 times). The following is a list of the 10 "library-use" categories and the number of times each was mentioned in the collected syllabi during the two years of the study:

Categories of Library Use	Occurrences in Syllabi Text
Research Paper/Report/Project	289
Other	284
AV Equipment	186
AV Materials	167
Oral Presentation	118

Periodical Assignment/Reading	84
Group Project	83
Bibliography or Literature Search	55
Bibliographic Instruction	42
Reserve Material	29

When the "other" category was reviewed, seven items were mentioned 10 or more times. The category "case studies" was mentioned most frequently (54 times), followed by "journal" (43 times), "essays" (19 times), "computer programs" (13 times), "learning plan" (11 times), "exams" (10 times), and "field trip" (10 times). There were 17 items in the "other" category mentioned fewer than nine times (Appendix 3).

DISCUSSION

It would be easy to get immersed in all of the statistics and cross-tabulations that are available. For the purposes of this discussion, the authors will review the results of the syllabus study and determine whether or not the three objectives, identified at the beginning of this paper, were achieved.

The first objective, "to anticipate library-use needs" for a particular course, was achieved through course syllabi analysis. This analysis, coupled with the fact that courses generally occurred once per week at the Suburban Campus Libraries, allowed librarians to have enough information and time to respond to library-use needs.

In the matter of the second objective, preparation for bibliographic instruction, the librarians found the syllabus study to be an effective tool with which to market the bibliographic instruction program and other library services available at the Suburban Campus Libraries. For example, a syllabus might indicate that a research paper was a requirement for a class. The librarian could then approach the faculty member with recommendations for a bibliographic instruction session or with source recommendations (especially for those sources located at the extended campus sites).

In the area of curriculum development, the third objective, the authors concur that this goal was sparingly achieved. After the syllabus study began, a few faculty members did begin to schedule regular bibliographic instruction sessions. More often than not, however, faculty were reluctant to change the structure of their courses to include library use (when they did not originally) because of the time involved.

An unexpected outcome was the implementation of a syllabus study at DePaul's Loop Campus in January, 1993. Objectives for this study were similar to those used at the Suburban Campus Libraries. Winter Quarter College of Commerce courses were analyzed by the faculty member rather than by the Loop Campus librarians due to the large number of courses. The "Syllabus Study Analysis Sheet" used at the Suburban Campus Libraries was modified for use by the College of Commerce faculty. The analysis sheets were collected in each department and then funneled to the Loop Campus Library. The evaluation of the Loop Campus syllabus study has not yet occurred; additional data is needed from which appropriate conclusions can be drawn.

After discussing the results of the study in relationship to the objectives, the Suburban Campus librarians agreed to continue to collect and review course syllabi. However, the syllabi will not be formally analyzed. The librarians felt that benefits such as improved interaction with faculty, and having syllabi available for clarification of library-use needs could be realized without the formal analysis process. The authors agree that the study has been very beneficial and would recommend implementation of similar studies at other extended campus libraries that have a workable number of courses each term and staff with the time available to conduct such studies.

APPENDIX 1

LIBRARY USE GUIDELINES

AV Material:

Material used is researched and ordered through the library, or the instructor locates own material and orders it through the library.

AV Equipment:

An instructor or student uses equipment for a classroom presentation.

Bibliographic Instruction:

Any official classroom contact from a simple introduction of the librarian to a formal library instruction presentation.

Reserve Material:

Material on reserve may be from the library collection, or the library may be used as an intermediary for non-library material.

Bibliography or Literature Search:

Students are encouraged to use either DePaul's resources or can use any collection of sources to complete the assignment.

Research Paper/Report/Project; Oral Presentation; Group Project:

These assignments may require in-depth library use to locate sources or can be based on experience, interviews, etc. with library sources used just for background information. Students may or may not be encouraged to use the DePaul Libraries.

Other:

Library use is based on assignment.

APPENDIX 2

SYLLABUS STUDY ANALYSIS SHEET

CLASS NAME:____

CLASS NUMBER:____

CLASS INSTRUCTOR:____________________________________

CAMPUS:____

DEPARTMENT:____

CLASS DESCRIPTION:___________________________________

DAY:____________ TIME:____________ QUARTER/YEAR:___________

CLASS LEVEL: circle one U G CERTIFICATE PROGRAM

LIBRARY USE:* (Note number of times library-use category occurs in the syllabus)

____ AV material
____ AV equipment
____ Bibliographic instruction
____ Reserve material
____ Bibliography or literature search
____ Research paper/report/project
____ Oral presentation
____ Group project
____ Periodical assignment/reading
____ Other (please describe)

Action(s) taken:

Result(s):

APPENDIX 3

SYLLABUS STUDY--TWO-YEAR TOTALS
EXAMPLES IN "OTHER" CATEGORY
(2 OR MORE OCCURRENCES)

EXAMPLE	# OF OCCURRENCES
Case studies	54
Journal	43
Essays	19
Programs	13
Learning plan	11
Exam	10
Field trip	10
Research proposal	9
Library workbook	7
Case reports	6
Lab experiments	4
Simulation	4
Interviews	4
Assignments	3
Panel debate	3
Video reviews	3
Computer exercises	3
Position paper	3
Real estate analysis	2
Definition paper	2
Goal action plan	2
Readings	2
Lectures	2
Portfolio	2

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Obstacles to User Education for Off-Campus Students: Lecturers' Attitudes to Library Skills

Shirley J. Behrens
University of South Africa

The concepts of information literacy and lifelong learning are certainly not foreign to librarians today, especially since the influential report of the ALA (*American Library Association* ... 1989) which has been extensively referred to in the most recent literature on user education. The purpose of user education programmes is to teach library skills to students. These skills comprise information gathering and utilization skills - that is, skills which are necessary for information literacy and which are a prerequisite for lifelong learning.

The teaching of information-related skills does not lie only in the domain of those institutions where students are on campus daily. Off-campus students require the same set of skills if they are to be prepared for independent, lifelong learning, and this is part of the reason why additional attention is being paid to user education programmes at distance learning institutions.

If one considers the barriers when teaching library skills to off-campus students, there are several obvious obstacles such as the geographic dispersion of students, shortage of library resources, and insufficient staff or funding available for user education programmes. This paper concentrates on a less obvious but very real obstacle: faculty's attitude towards the need for students to possess library skills. Even though the library might provide user education programmes, the students could be denied the opportunity of gaining independent information gathering skills due to factors relating to lecturers' attitudes, for example their lack of perception of the value of library skills in the learning process.

Using a grounded theory of library skills requirements at a distance learning institution, it will be shown how several phenomena affect the lecturers' attitudes to library skills, and how these attitudes determine whether the students will have the opportunity of learning, and applying, information skills in their formal curricula.

FACULTY INVOLVEMENT IN USER EDUCATION PROGRAMMES

If students are to learn library skills effectively, such skills ideally need to be learnt within the broader framework of information skills which are required for information literacy. In view of the fact that the teaching of any information-related skills is best accomplished in a subject-related manner, it is obvious that the cooperation of faculty is vital. Course integrated library skills instruction especially is extremely dependent on lecturers for its success (Carlson and Miller 1984, 486). This is true of both residential and distance learning institutions. With particular reference to off-campus students, Grimison (1988, 45) notes that the effectiveness of library skills programmes depends on the amount of academic staff involvement in the programmes.

If faculty cooperation is essential for the success of user education programmes, it stands to reason that the attitudes of lecturers towards library skills could affect the chances that students have of learning how to gather and utilize information effectively.

SURVEYS ON LECTURERS' ATTITUDES TO LIBRARY SKILLS

Recent reviews of the literature show that there is very little reported research on the role which faculty attitude plays in the effective teaching of library skills (Maynard 1990; Hardesty 1991, 5-10; Behrens 1992, 147-159). If one looks at recent investigations into lecturers' attitudes to library skills, very few of these surveys were extensive or scientific. The majority of the surveys reported in the literature emanate from the USA, although mention can be made of two British surveys which did briefly touch on the attitudes of university lecturers towards library skills (Cowley 1988, 1990). With regard to faculty attitude to library skills at distance learning institutions, there is very little to go by. Haworth (1982) interviewed lecturers at the Royal Melbourne Institute of Technology in Australia, and Burge, Snow and Howard (1989) included "faculty/instructors" in a survey of several aspects of library services in distance learning institutions in Canada.

There is thus a lack of solid empirical research into the issue, especially in a distance learning environment. This deficiency becomes more conspicuous if one considers the vast body of literature on more general user education issues such as methods, modes and particular programmes.

Brief mention will be made here of some of the findings of American surveys which have been reported in the literature. In many of these investigations, the faculty attitude aspect was only a small part of a larger survey. The various investigations did not necessarily assess the same criteria, so it is difficult to make substantial comparisons. However, are there are some similar findings on faculty attitude to library skills; these relate essentially to residential universities whose students have easy access to the library and its user education programmes.

There is evidence that faculty feel that freshmen should arrive at university already in possession of library skills (Lubans 1980, 121-122; Greer, Weston and Alm 1991, 550) - in fact, generally "a very broad range of library skills" is expected in undergraduates (Kemp and Nofsinger 1988, 78). However, in practice, lecturers find that students lack the skills necessary in order to undertake library research (Thomas 1984, 433; Wheeler 1988, 18; Haws, Peterson and Shonrock 1989, 202; Maynard 1990, 69-70). Most of the surveys indicate that although faculty expect students to be proficient in library skills but find these lacking, the lecturers seldom undertook responsibility for library skills instruction (Thomas 1984, 433; Kemp and Nofsinger 1988, 78; Maynard 1990, 69-70). Most lecturers believe that freshmen should be required to take a course in library skills (Haws, Peterson and Shonrock 1989, 202; Maynard 1990, 71), but there is evidence that the lecturers do not feel that the teaching of these skills is their responsibility (Haws, Peterson and Shonrock 1989, 202).

Faculty's response to survey questions was often found to be contradictory or inconsistent (Wheeler 1988, 18-19; Maynard 1990, 69-73), such discrepancies possibly indicating that lecturers' could be uninformed or unaware of the value of library skills instruction.

Hardesty undertook one of the few extensive, scientific surveys. He reports on an attitude survey undertaken by means of interviews with 40 lecturers in seven tertiary institutions in the USA during 1981/1982. His findings are based on empirical studies undertaken for a doctoral dissertation (Hardesty 1982), but subsequently also on current literature perused for a recent book (Hardesty 1991). The findings cover a number of issues. He reported, *inter alia*, that most lecturers are either not able, or not willing, to support undergraduate library use; many lecturers do not know why, how or when it is necessary for students to use the library; and faculty had not given the issue of student library use much thought and consequently many lecturers had limited views about the role of the library in the learning process.

From the few available surveys, it becomes evident that a positive attitude from faculty is vital if library skills are to be taught successfully. If a lecturer has a negative attitude towards the teaching of library skills, this is likely to influence the chance his students might have of learning these skills. In short, lecturers' attitudes could deny students the opportunity of learning independent information gathering skills.

To summarize findings of these surveys: The most common problem highlighted is that although faculty feel that students lack the library skills required for their studies, the lecturers seldom attempt to remedy the situation by providing the necessary instruction. Lecturers do not appear to value the role of library skills, and do not regard the teaching of these particular skills as being part of their particular (subject-teaching) domain. It should be noted that these findings are not necessarily only recent (see, for example, Knapp 1958; Allen 1970). However, in view of the overabundance of literature on user education, it is odd that the issue has not been researched in more depth.

THE UNISA STUDY

To establish what engenders and influences the attitudes of lecturers towards library skills for students at a distance learning institution, empirical research was undertaken at the University of South Africa (Unisa) from 1990-1992 (Behrens 1992). Unisa is a distance learning university with 130,000 students. Many students who qualify for entrance at first-year level are underprepared for tertiary studies due to several factors. A major problem is the poor schooling system which is a legacy of the political history of the country, and a large percentage of freshmen come from environments where there are inadequate or no library facilities either at school or in their communities. They arrive at university with a lack library skills and little or no library ethos - and this is over and above their general lack of information skills competencies.

Given this background, one can deduce that the teaching of library skills is vital at Unisa, but has additional complications apart from the general obstacles related to distance teaching.

GROUNDED THEORY STYLE OF QUALITATIVE RESEARCH

For this project, the grounded theory style of qualitative research was used to explore the attitudes of Unisa lecturers towards the need for library skills in students, and the teaching of such skills. Based on the findings, two grounded theories of library skills requirements were proposed: one which is relevant specifically for Unisa, and a more generalized theory for distance learning institutions. The research objective of the project was exploratory with a view to "verstehen"; that is, to gain a greater understanding of lecturers' attitudes in the Unisa situation. Although the aim was not to generalize the findings in a wider context, it was possible to use the grounded theory proposed for Unisa as the basis for a more generalized theory for wider application to other distance learning institutions. It is the generalized theory which is outlined in this paper.

Grounded theory procedures require a high degree of scientific discipline through the processes of description, definition, and specification of relationships. Grounded theory is a theory which is grounded in reality. In other words, it is grounded in the data analyzed. By using a systematic set of procedures, an inductively derived theory is developed. Grounded theory is not a specific method or technique; it is rather a **style** of doing qualitative analysis (Strauss 1987, 5).

The grounded theory proposed here is derived from the data obtained from interviews with Unisa lecturers. In-depth interviews were held with a purposive sample of ten lecturers. Half of the sample taught subject courses at first-year level which showed weak evidence of library use requirements, and half taught first-year subject courses which showed strong evidence of library use requirements.

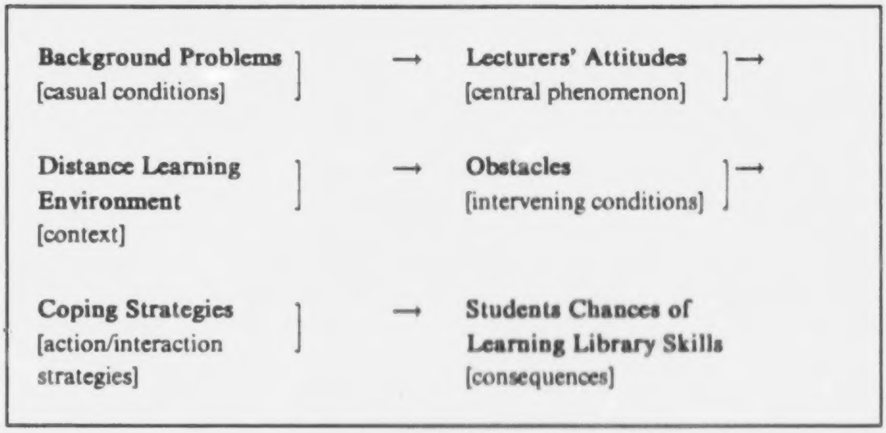
The analysis of the data (i.e. the interview transcriptions) was based on open, axial and selective coding according to the grounded theory style. Memos and conceptual diagrams were also used. The grounded theory procedures as outlined by Strauss and Corbin (1990) were followed, and the computer program *The Ethnograph* (Seidel, Kjolseth and Seymour 1988) was used to manage the mechanical aspects of data analysis, such as sorting designated codes and printing data files.

THE PARADIGM MODEL

During axial coding in the grounded theory style, categories and subcategories of data are related through a paradigm model (Strauss and Corbin 1990, 99). This paradigm model was used as a framework for the grounded theory proposed here.

The generalized grounded theory of library skills teaching for distance learning institutions is illustrated in brief form in Figure 1, and in detail later in Figure 2.

Figure 1: The paradigm model of the theory


Background Problems
[casual conditions]
Lecturers' Attitudes
[central phenomenon]
Distance Learning Environment
[context]
Obstacles
[intervening conditions]
Coping Strategies
[action/interaction strategies]
Students Chances of Learning Library Skills
[consequences]

GROUNDED THEORY OF LIBRARY SKILLS REQUIREMENTS AT A DISTANCE LEARNING INSTITUTION

The proposed grounded theory covers a wide range of phenomena which have bearing on the teaching of library skills at a distance learning institution. The theory includes:

- **causal conditions** which relate to the incoming freshmen prior to any library skills teaching at tertiary level
- **the context** within which library skills are to be taught
- **intervening conditions** which may provide obstacles to library skills teaching
- **action/interaction strategies** which affect the teaching of the skills
- **the consequences** of all these factors

All the phenomena discussed in this theory affect the lecturers' atittudes to the library skills requirements of students, as well as the teaching of library skills.

CAUSAL CONDITIONS: BACKGROUND PROBLEMS

The educational background of the freshmen will have a bearing on library skills teaching. The schooling system from which the student comes determines his existing level of library skills and his whole library ethos. At Unisa the pre-tertiary schooling system is problematic and a large percentage of freshmen have no, or underdeveloped, library skills. In fact, libraries are completely foreign for many students, and consequently the use of the library does not feature at all in these students' customary frameworks for studying.

Apart from the specific skills required for effective library use, the wider information skills competencies of freshmen are also relevant. The gap between school and university appears to be a world-wide phenomena.

The students' attitudes towards their studies also form part of the background scenario. Do students take their studies seriously and believe that they are at university to learn? There appears to be a general feeling amongst faculty that a large number of students are not there to learn, but rather enrol for tertiary studies in order to obtain a qualification. It is the piece of paper they are interested in, and not the learning experiences which could be gained while chasing it. In the Unisa interviews, one lecturer referred to such students as the "minimal type".

The composition of the student body plays an important role. A heterogeneous student body is common at today's institutions of learning, and is particularly prevalent at South African universities which have to cater for a diversely multicultural society. The additional traditional heterogeneous nature of a distance learning student body adds to this particular problem.

With this background of factors which are predetermined, and over which the university has essentially no control, the context within which teaching takes place can be considered.

CONTEXT: THE DISTANCE LEARNING ENVIRONMENT

The student's basic study package depends on the methods and modes used by the distance learning institution, and these, of course, could be substantially different from residential universities. The subject course material could be conveyed by several modes other than "talk-and-chalk" lectures, some examples being the printed mode (e.g. prescribed books and study guides), and other formats such as audio-cassettes, slide-sound programmes, video cassettes, radio and television broadcasts. Teaching methods vary, for example students could complete the course by means of self-study workbooks, self-paced work schedules, and/or definite dates for assignment submissions and examinations.

The frameworks within which the subject courses are taught could also be categorised in several ways. For example, there could be a "lecture-textbook" approach, where all study material is conveyed through either verbal or written lectures together with prescribed textbooks. This method might be accompanied by the use of library books (usually pre-selected by lecturers and placed in a reserve section of the library). This method is referred to as the "reserves-lecture-textbook" approach. Alternatively, the course could be a "one-stop-shop" where all the study material is contained in one package, such as a self-contained book which entirely replaces lectures and any other external material. The teaching frameworks could require independent information-seeking by students; alternatively, there could be no such requirement.

This brings us to the lecturers' assessment of the students' subject knowledge and information skills competencies. Such knowledge (grasp of the subject) and general cognitive skills are usually assessed by means of practical or written assignments which are marked by lecturers, culminating in examinations which determine whether the student passes on to the next level of study.

At tertiary level, a student's information skills - especially higher level cognitive skills such as critical analysis and evaluation, synthesis and presentation - are assessed alongside the subject content of a course. Whether independent information seeking is assessed as part of the information skills totality depends on the learning framework of the course as outlined earlier. For example, whether or not students are required to move beyond their prescribed study material, and locate and utilize information which has not been included in their pre-selected information package. In other words, whether students are expected to exhibit independent information seeking by utilizing additional information sources (such as those housed in libraries), and not only those which might be placed on reserve for them in the university library.

The context of library skills teaching cannot be discussed without consideration of whether or not students are expected to make use of the library for their subject courses. If a course does not require a student to use a library, the chances are slim that he will take the trouble to do so.

User education programmes offered by the university library are obviously relevant here. If the library does present such programmes, but the student does not need to attend them (either because the programmes are non-compulsory, or stand-alone, or non-credit bearing), there is once again little likelihood that students will take such programmes seriously. It is only the very motivated student who will learn library skills if these are not demanded for a subject course, especially if they receive no credit for applying such skills.

Thus, the context within which students study includes the teaching methods and modes, the learning frameworks, knowledge and skills assessment, and the place of user education programmes in the curriculum. In essence, what is relevant here is whether library skills competency is precluded or included when the student's final assessment (such as in assignments or examinations) is made.

OBSTACLES: INTERVENING CONDITIONS

There are numerous obstacles to distance learning, but only those obstacles which have a direct bearing on the learning of library skills are relevant here.

In the Unisa study, the student's general information skills competency on entering the first year of study proved to be a major obstacle. In fact, the general underpreparedness of the freshman intake became the central phenomenon of this study. There was a strong need for almost "remedial" teaching, such as is usually provided for in academic support (or bridging) programmes, in order to upgrade general information skills before the students could cope effectively with the subject content of the courses. If a lecturer has to spend additional time teaching reading and writing skills (not to mention the higher-order cognitive skills), the need for library skills is unlikely to be a priority in the lecturer's opinion. Unless faculty is aware of the role of library skills in independent learning, it is doubtful that lecturers would consider such skills as a necessary part of any academic support.

In distance learning, it is common for students to be in fulltime employment, with their studies undertaken on a part-time basis. As such, their workloads are heavy. Additional courses in library skills could be difficult to motivate, to both students and faculty. Another factor here is faculty's belief that students simply do not have the time to undertake additional library research or additional reading beyond that which is already covered in the compulsory study package.

Access to the university library, or any suitable library, is an obvious obstacle to library skills teaching at a distance learning institution. This access need not be regarded simply from a geographic viewpoint. If the university library appears "unfriendly" to students, their desire to use it would be diminished, even if they live in close proximity to the campus. Library opening hours are also a factor here, for example if the library is open throughout the night and over weekends. A further factor could be the intricate and complicated storage and retrieval methods used in modern, hi-tech libraries. Students could find these daunting, especially if they are not computer literate.

The majority of students could even be within easy distance of the main library or a branch library. However, it might not occur to lecturers that this relative ease of access could mean that students are actually close enough to make personal use of the library on a regular basis.

The library might have developed policies which inhibit independent library use by students. For example, the library might not encourage faculty to expect library use of students, or the methods which the library uses to issue library material to distance students might preclude their need to possess library skills. Unisa students, for example, request items by filling in and posting request cards. The documents are then sent to and fro via the mail system, and this requires no library skills on the part of the students.

Faculty's ignorance of the whole library skills issue is considered to be a central phenomenon in this theory. Lecturers' ignorance of what library skills are, and the role of library skills in the learning process, were strongly evident in the Unisa study. It became apparent that faculty had not given the matter much thought. To illustrate these points, the following are two of the replies from lecturers when asked what they believed library skills involved:

> *X: "Yes, umm. I don't think, yes, it's difficult. Umm ... I don't know. Can you repeat that again? [Question was then rephrased.] ... Uh, I mean, you know - detective work. Yes. I really don't know."*
>
> *Y: "Um. Oh yes. Oh yes. Yes. Yes. It's ... [long pause] ja, um ... [long pause]. Ja, one needs to, you know, one needs to learn where to find certain, certain material. Um, to learn that, um, you know, that, well, that certainly the layout, the organization of the present library. That you can find material by computer from 1984 to the present, and for older material you look at the card catalogue. It has, the library has an archive, it has a reference section, it has a, and so on. It has a study collection, it has a journal collection, it has a general book collection."*

It could seem, therefore, that other than basic orientation to the library, the lecturers might not perceive that further skills are involved in locating and utilizing the information available in the library. But the lecturers might never have had to really **think** about the issue:

> *"You know, you're asking me questions that I've never thought about, because I haven't sat down and thought about the library like you have thought about it."*

ACTION/INTERACTION STRATEGIES: COPING STRATEGIES

There are usually various "coping strategies" adopted in attempts to solve problems related to distance teaching. Such action/interaction strategies could, for example, relate to the library's attempts to teach library skills. Faculty's response to such attempts, or the lecturers' general attitudes to the role of library skills in the learning process, could also then manifest as coping strategies.

An obvious coping strategy would be the library's presentation of user education programmes. These could range along a wide continuum, such as from basic library orientation to bibliographic instruction in online database searching. The programmes could be stand-alone, or the library skills teaching could be incorporated within the subject courses in an across the curriculum approach.

Two main points are relevant here. Firstly, whether the user education programmes have the support of faculty, for example whether lecturers show an interest in their students' attendance at such programmes - and whether students receive credit either for attendance of the programmes, or for showing competence in the skills. The second point is whether or not library skills are taught within the formal, credit-bearing subject curriculum. In such cases, the importance of library skills would seemingly be recognized not only by the library but by faculty as well, since lecturers might be involved in the teaching of library skills if these are incorporated within the subject courses, with the accompanying appraisal of such skills within the general information skills assessment.

The library use requirements which the subject curricula demand also have relevance. If a subject course does not require library use from its students, then one can assume that library skills do not form part of the course's information skills requirements. By extension, this could also indicate that the lecturers are not concerned about their students' library skills abilities.

An interesting finding in the Unisa study was that faculty regarded referencing methods as an important library skill. Most lecturers placed very heavy emphasis on students' correct application of reference technique (e.g. Harvard method of reference) in written assignments. This could be interpreted as faculty's subconscious way of excusing a lack of library use requirements in subject courses. If a lecturer regards reference technique as an important "library skill", but it is in effect the only "library skill" which his course requires, he could feel that the course **does** demand proficiency in library skills - and his conscience (if any) is thus eased!

Academic support programmes could also provide coping strategies if such programmes provide a vehicle for the upgrading of library skills, or even merely provoke an awareness in the student of the role of the library in the learning process.

Distance learning instititions have to modify their teaching methods and modes to suit the distance factor. A prime example here is the "one-stop-shop" course, where all the required study material is provided for the student in one comprehensive package which requires no further information seeking. If such modifications involve the curtailment of library use for any reason, then the library skills requirements of students are not likely to be considerable. In the same vein, if students are provided with additional reading titles, but are not given credit for having studied these, they are unlikely to make use of additional sources available in the library for their studies. All these distance learning coping strategies affect the student's perception of the role of the library for study purposes.

An important factor which cannot be ignored as a coping strategy is "The Excuse". The fact that the institution provides tuition by distance teaching methods, provides a handy excuse for not doing things the way they could be done with a bit of lateral thinking on the part of librarians and lecturers, and additional effort on the part of the students. The prime excuse here is that since students are not on campus, they cannot be expected to use the library and therefore do not require library skills.

One must remember that students also manifest coping strategies. If they are the "minimal type" of student, they will do the least amount of work required in order to pass the course. If the course not does not require library use, then they will not use the library and its sources. And if existing user education programmes are not compulsory or credit-bearing, students are unlikely to take them seriously. Students soon "plug into" what the minimum requirements are of the institution.

CONSEQUENCES: STUDENTS CHANCES OF LEARNING LIBRARY SKILLS

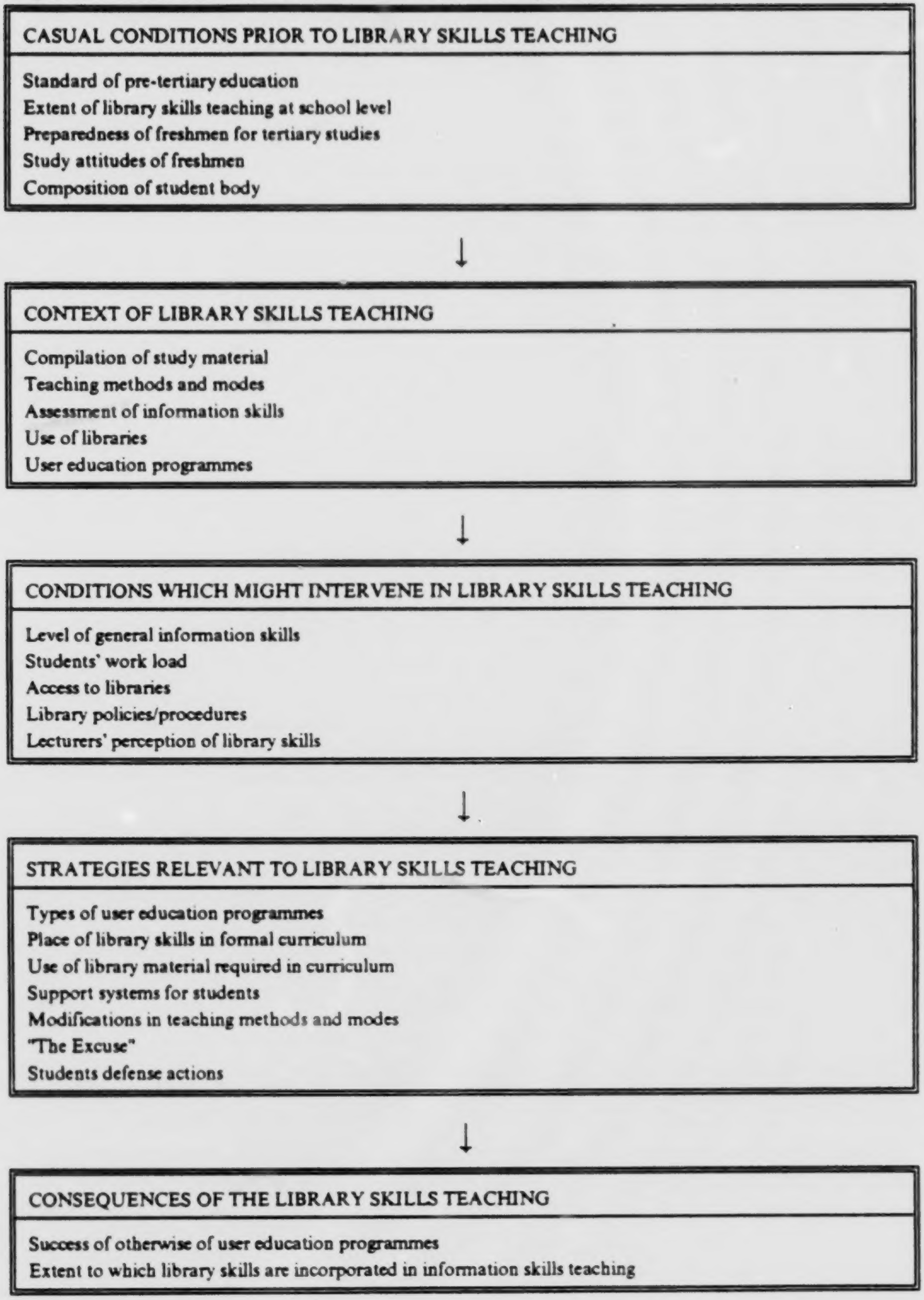
The consequence of all the factors discussed above is the place which library skills occupies in the particular distance learning institution. If there are many factors which point towards positive attitudes to library skills being important in the learning process, then the user education programmes are likely to be successful and students will thus have the opportunity of learning and applying library skills in their studies. However, if many of the factors have negative indications, it stands to reason that any attempts to provide user education will have the odds stacked against them.

Since it is the lecturing staff who decide what subject content - and what information skills - are to be assessed in the subject courses, if a lecturer has a negative attitude towards the value of library skills, the students of his course are unlikely to learn such skills. Where a lecturer shows positive attitudes towards the place of library skills, the students of that course are likely to be encouraged to learn library skills, either in user education programmes, or by means of library skills being incorporated within the general information skills assessment of the course.

CONCULUSION

If librarians wish to strengthen the role of the university library in the learning process, they need to become more assertive participants in the educational process by forming a partnership between themselves and lecturers. But in order to do this, it is necessary for them to first have an understanding of the faculty culture within which lecturers operate. Such a partnership is dependent upon the librarians' knowledge of how lecturers view the importance of library skills, and the extent to which they expect these skills of their students. Hardesty (1991) proposed that librarians will only be able to effect change in lecturers' attitudes if they **understand** the lecturers and their attitudes. The proposed grounded theory of library skills teaching as discussed here could provide user education librarians with a better understanding of what influences faculty's attitude towards library skills teaching.

Figure 2: Grounded theory of library skills at a distance learning institution



CASUAL CONDITIONS PRIOR TO LIBRARY SKILLS TEACHING

Standard of pre-tertiary education
Extent of library skills teaching at school level
Preparedness of freshmen for tertiary studies
Study attitudes of freshmen
Composition of student body

↓

CONTEXT OF LIBRARY SKILLS TEACHING

Compilation of study material
Teaching methods and modes
Assessment of information skills
Use of libraries
User education programmes

↓

CONDITIONS WHICH MIGHT INTERVENE IN LIBRARY SKILLS TEACHING

Level of general information skills
Students' work load
Access to libraries
Library policies/procedures
Lecturers' perception of library skills

↓

STRATEGIES RELEVANT TO LIBRARY SKILLS TEACHING

Types of user education programmes
Place of library skills in formal curriculum
Use of library material required in curriculum
Support systems for students
Modifications in teaching methods and modes
"The Excuse"
Students defense actions

↓

CONSEQUENCES OF THE LIBRARY SKILLS TEACHING

Success of otherwise of user education programmes
Extent to which library skills are incorporated in information skills teaching

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What's All the "Hype" About? Using Hypercard in an Off-Campus Library Environment

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Diversity and creativity have been more the rule than the exception in providing library services to non-traditional students at the Baldwin County Branch of the University of South Alabama. As with many other off-campus situations, the "traditional" approaches to library services are often ineffectual or economically infeasible. Fortunately, the varied capabilities of the HyperCard software provide numerous possibilities for the unique presentation of library services. This branch is currently using a HyperCard-based computer-assisted instruction program to instruct students in the use of periodical indexes and SOUTHcat, the library's automated materials catalog. This paper will explore some of the applications and benefits of Hypercard programming as used in an off-campus setting in Alabama.

BACKGROUND

Having opened in late 1984, the branch of the University of South Alabama in Baldwin County is still very much in its embryonic stage. While the county has recently taken the lead in growth rates within the state, it is not by any means heavily populated having only 100,000 people. The pastoral settings adjacent to white sandy beaches are a draw for retirees, while families are also attracted by the quality public schools. To avoid duplication with a local community college, our branch offers only upper level and graduate courses. Thus, while the branch has seen consistent increases in enrollment, given the population base and course restrictions, it will probably never obtain a large student body, which stands now at roughly five hundred fifty students.

The direction of the library services has certainly been influenced by the timing of the establishment of the branch. By the late 1980's, technology had already been heavily ingrained into the informational services. Thus, it was only a natural step for the new branch to let technology be its leading means of services instead of building the standard expensive and quickly dated collection. The other factors influencing our service direction is that the branch is only forty miles from the main campus library's collection. A courier can provide fast turnaround access to this collection for our students. Contractual arrangements with the community college library and a public library provide students with local reference services and space for the placement of upper level materials. Thus, the thrust of the branch services has been technological access to bibliographic and full-text databases.

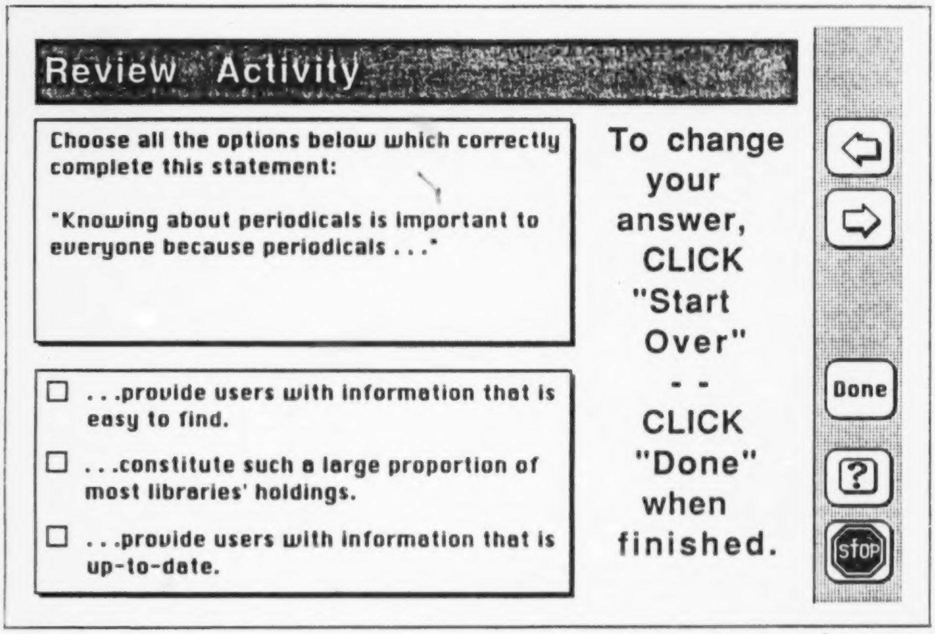
As with the national trend, the profile of the student body of the Baldwin County Branch is most definitely the "non-traditional" student aged 25 - 45 who works full-time and is completing a degree or changing career directions. To accomodate these students, most classes are taught one time a week in the evenings. The staffing for the branch library services is limited to my services as a full-time professional librarian and one part-time para-professional who works minimal hours at the local public library to cover some night hours. Given this low level of staffing, I have made special efforts to keep the technology as "student friendly" as possible. All services have menu-based access and brochures giving the basic search techniques. This level of staff coverage and the combination of traditional and automated library services were the two primary reasons that I began looking for a self-contained instructional program which could accommodate the varying levels of students' expertise in library research. My goal is so clearly stated by Keenan in her article on the adult learner: "By empowering students to master their own research strategies, the librarian is reinforcing the individual's need for self-accomplishments and self-direction. The adult learner becomes the consummate end user" (Keenan 1989, 153).

ALL HYPED UP

Since I had taken a HyperCard course several years earlier, I was very much aware of the potential use of this program for computer-assisted instruction and was eager to try it for library guidance. I will make no attempt here to formally define HyperCard; yet, for those readers who are totally unfamiliar with it, a description of its capabilities will follow. HyperCard is a microcomputer product through which a succession of screens (or cards) can be developed to relay information on any subject. Its multimedia aspects enable the designer to add a little spice to the presentation by drawing or scanning in your own graphics or photographs which can then be programmed to move around on the screen; adding your own voice or any sounds you wish to record; linking appropriate responses to question/answer dialogues (Figures 1 & 2); or linking to other device drivers like videodisc players. It is the predominant product of its kind, not only because of its innovations, but also because it is provided free with every new Macintosh computer. Certainly, one of its primary attributes is the ease of editing. If one part of a program becomes outdated or needs amplifying, it can be changed without disturbing the remaining screens. In short using a human analogy, HyperCard would be a hyperactive Renaissance person.

About the same time as I had started seriously thinking about developing my own HyperCard instructional program, I saw an announcement about a series of programs constructed by a group of librarians at the University of Tennessee, Knoxville. They had obtained a grant from the U.S. Department of Education and Apple Computer to develop six self-directed programs for the purpose of training new staff members (Bayne and Rader, *C&RL News* 1991, 678). Since federal funds were used to support this project, the authors made the entire series of HyperCard stacks (of cards) or programs available to others who could modify them as needed for their sites. The six training sessions are: Orientation, Resource Sharing, From Request to Shelf, Access to Periodicals, Computers in Libraries, and Reference Services (Bayne and Rader 1991, 5). Also available is an introductory segment which explains how to maneuver through a program using a mouse on a MacIntosh computer. While all of these segments would probably not be needed, several certainly sounded very promising for adaptation for local use.

After reviewing the programs, I felt the segment which would be of immediate use was the "Access to



Review Activity

Choose all the options below which correctly complete this statement:

"Knowing about periodicals is important to everyone because periodicals . . ."

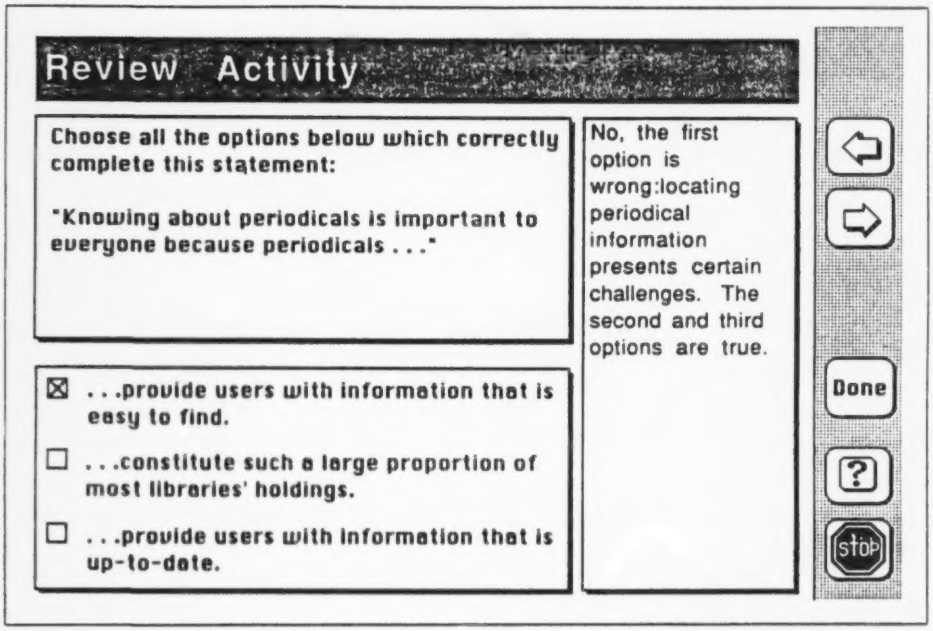
☐ . . .provide users with information that is easy to find.

☐ . . .constitute such a large proportion of most libraries' holdings.

☐ . . .provide users with information that is up-to-date.

To change your answer, CLICK "Start Over" - - CLICK "Done" when finished.

Figure 1: Review activities require students' participation



Review Activity

Choose all the options below which correctly complete this statement:

"Knowing about periodicals is important to everyone because periodicals . . ."

☒ . . .provide users with information that is easy to find.

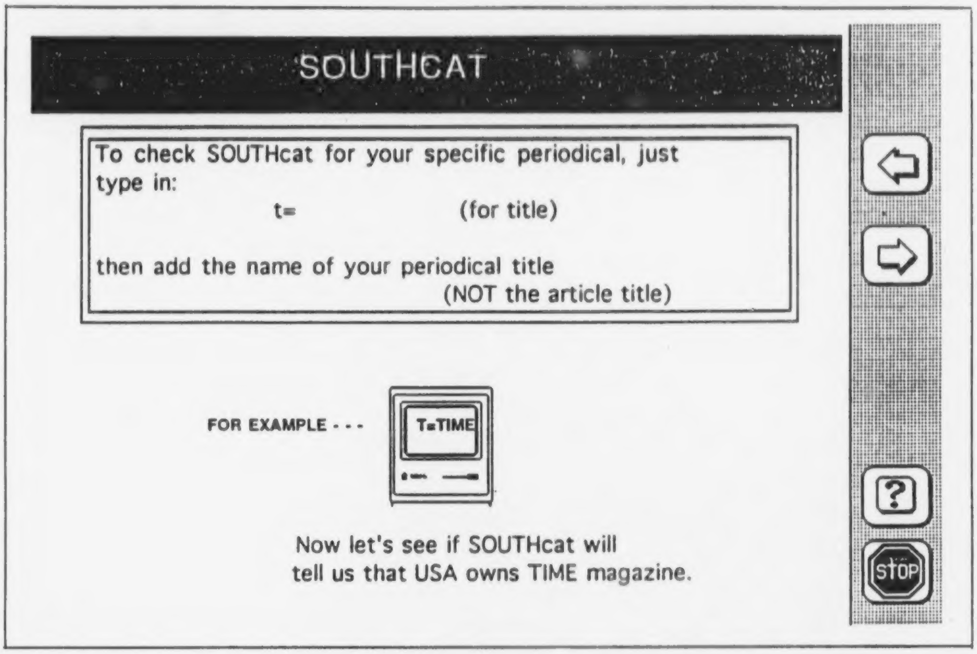
☐ . . .constitute such a large proportion of most libraries' holdings.

☐ . . .provide users with information that is up-to-date.

No, the first option is wrong:locating periodical information presents certain challenges. The second and third options are true.

Figure 2: Students get immediated feedback to their answers

Periodicals". In adapting this program for student use at the University of South Alabama's branch, I found that a significant amount of editing was needed for two purposes: to shorten the program and to add local information about searching the university's collection. Even though the program as designed was very good, I felt it took much more time to complete than a student's patience would allow. By eliminating a number of screens, the total time needed to complete the "Mac" introduction and the locally adapted program was reduced to twenty to twenty-five minutes. The major change to the program involved adding screens which lead a student through the steps of using our automated catalog to check on the availability of periodical titles (Figure 3). Since I was familiar with HyperCard, these changes did not take an exorbitant amount of time, certainly much less time than designing an entirely new program would have required.



SOUTHCAT

To check SOUTHcat for your specific periodical, just type in:
t= (for title)

then add the name of your periodical title
(NOT the article title)

FOR EXAMPLE - - -

T=TIME

Now let's see if SOUTHcat will tell us that USA owns TIME magazine.

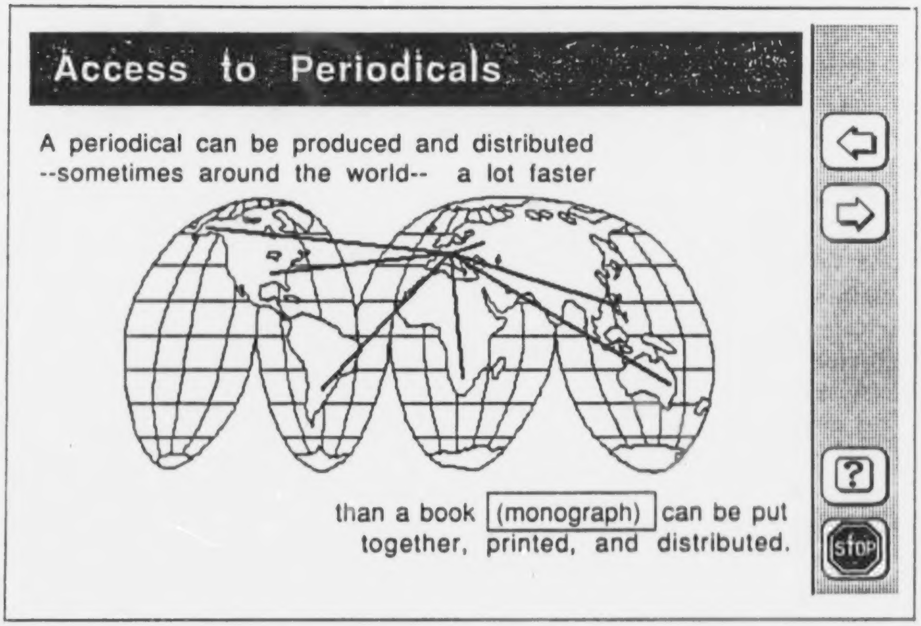
Figure 3: Instructions for using our automated catalog, SOUTHcat.

THE TEST

The adapted HyperCard program is now available on a MacIntosh computer for anyone to use. The target audience for its initial evaluation, however, were students in an "adult studies" course. This course was developed as an introductory class to orientate returning students to the services available and requirements necessary to complete a degree under a program which is more individualized and self-directed. To qualify for this "Personalized Studies Program for Adults" (PSPA) Program, the student must be twenty-five years of age or older. Most of our students are well over this age and have not done any significant library research in years, so a library module was incorporated into the course.

Our library instruction began years ago as just a basic tour of the main library at which time the students could check out a book for a report. Later, a journal article requirement was added to refresh their memories in searching the periodical indexes, but quite often students were pushed for time to finish both assignments. With the development of this HyperCard program, the journal article assignment was dropped from the main library tour, but the students were required to work through our computerized exercise on their own time. The timing was excellent, since keyword capabilities had just been added to our automated catalog and more time was needed during the tour to cover its use. This change in the library presentations more closely reflects the PSPA mix of group and individual assignments.

During the first quarter of use, the students were asked to submit a written evaluation of the HyperCard program. The next quarter, a formal questionnaire was distributed to secure detailed opinions of specific aspects of the program (Appendix A). Thus far, the feedback has been very favorable. One student commented, "Tutorials are better than written or verbal instructions." Other students liked the "active graphics" and "audio interludes." Several students felt ill-at-ease maneuvering the mouse at first, but this feeling faded with more experience. As one student even noted, "The glossary option in the program is good, since if you know the term you don't have to waste your time, but the definition is there, when you need it"
(Figure 4).



Access to Periodicals

A periodical can be produced and distributed --sometimes around the world-- a lot faster than a book (monograph) can be put together, printed, and distributed.

Figure 4: Clicking on any term in a square will give the user its definition from the glossary.

Having a free-standing instructional program is very beneficial, since staffing is limited. A student can use this program any time the building is unlocked, when staff members are not always present.

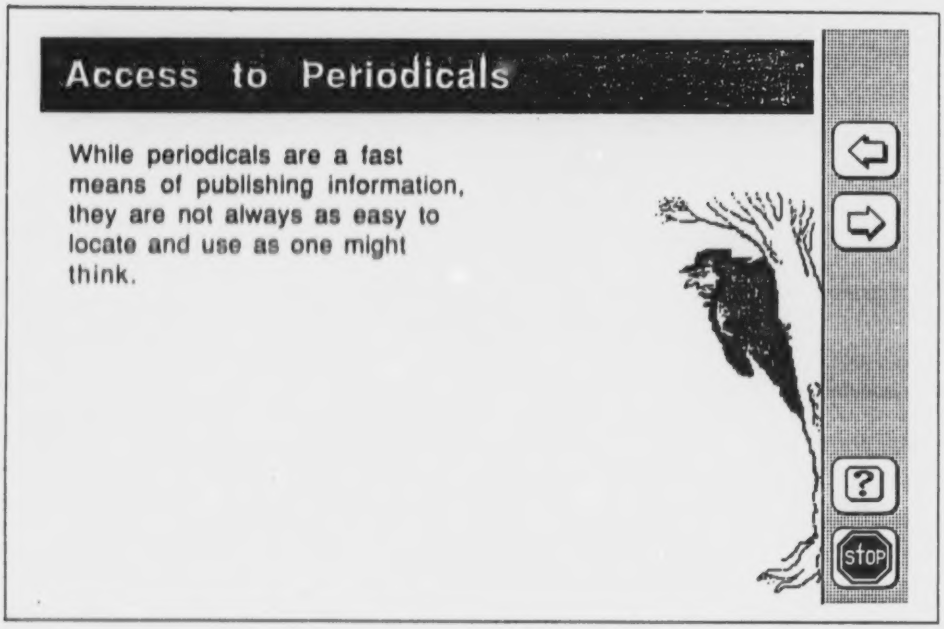
Even though our primary library services are electronic, it is important that the HyperCard program explains the printed indexes, since our students use a variety of libraries for their research. They can always translate the standard format to the electronic citation.

FUTURE PLANS

The original plan for the HyperCard development called for the initial program to be a general explanation of our branch services. Yet, when I saw the announcement about the available training programs, I knew that I could quickly adapt parts of it to our library uses. Now that this adaptation is complete, the initial plans are under development. This descriptive program will give an overview of the three categories of library services (electronic, document delivery and cooperating libraries), other student services and our branch locations. A personally recorded message from our Director will welcome everyone to the branch. Scanned photographs of all staff members and our buildings will help to personalized the presentation.

I plan to encourage the professor who teaches Hypercard to assign this project of an overview of branch services as a group project for one of his classes. A basic script and ideas for photographs and interviews would be provided to the class, leaving the innovations and creativity to them. If this plan does not materialize, then I will work on the program as time allows.

If only three points can be emphasized from this publication, then I will consider it a success. First, computer-assisted instruction is a valid direction for libraries. Secondly, you do not have to "reinvent the wheel" to get such a program up and running at your site, since there are numerous programs in use. (for example, Bayne and Rader 1991; Lawson 1989; Neuman and Jackson 1990.) Lastly, keep your message light and your patrons interested by adding humor and variety through your graphics, sound effects, and verbal exchanges (Figure 5). Some programs are available in a DOS platform; however, these might be "more limited in the graphics capabilities" (Lawson 1989, 72). Testing the effectiveness of a computerized approach in your situation by acquiring a grant-supported program or commercially-produced project would still be most economical. If your test is as successful as at our branch, soon you will be developing your own personalized programs.



Access to Periodicals

While periodicals are a fast means of publishing information, they are not always as easy to locate and use as one might think.

Figure 5: Humor, whether graphic or verbal, always perks up a program

Appendix A

Evaluation Questionnaire
of the
Computerized Instruction Program
Entitled
"Access to Periodicals"

Your Classification:______________________________

How many quarters have you attended USA?______________________________

There is no need to sign your name, but if you need to get credit for submitting this report, just attach your name on a separate sheet.

1. Have you used any periodical indexes in the last 3 years?

yes_____ no_____

2. Have you ever used SOUTHcat, the automated library catalog?

yes_____ no_____

3. Have you ever used a Macintosh before?

yes_____ no_____

4. Did you find the Mac tour helpful?

yes_____ no_____

5. Was the amount of information appropriate?

about right__ too overwhelming__ not enough__

6. Was the level of information appropriate?

about right__ too simple__ too hard__

7. Were the test questions helpful?

yes_____ unnecessary_____

8. For you, did this program provide:

a good review__ new search methods__ information you already knew__

9. Was this program worth your time?

yes______ no______

COMMENTS:

1. How could we improve this training session?

2. What did you dislike about this training program?

Please add any comments or opinions regarding this program or this type of training.

ENDNOTES

1. HyperCard is a hypertext software program, released 1987 and is available from Apple Computer, Inc.

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Satisfying Accreditation Requirements in Lean Times

Rebecca Bostian and Linda Farynk
Radford University

Radford University, with a student population of 9,500, is a state supported comprehensive university located in the Blue Ridge Mountains of southwest Virginia. Our off-campus courses are in many subject areas and in many locations. There are full degree programs as well as individual courses offered through various departments. Except for location, there is no distinction between these off-campus degree programs and those offered on campus. During fall semester 1992, there were eight off-campus sites serving the departments of Education, Business and Nursing. These sites included public schools, community colleges and a Graduate Center in a large metropolitan area that is shared with other institutions of higher education.

The university formalized its procedures to serve students taking courses off campus in fall 1989 in anticipation of a site visit for institutional reaccreditation by our regional accrediting agency, the Southern Association of Colleges and Schools (SACS), scheduled for spring 1993. Working with the Director of Continuing Education, who has responsibility for off-campus programs, and the Director of University Planning, the library put some policies and procedures in place.

An explanation sheet and a request form were developed (Appendix A and Appendix B). The patron identification portion of the request form needs to be filled out completely the first time so that we can enter the student into the library database if they aren't already there. An ideal scenario has the library staff, either at the host institution or the parent institution, directly participating in each off-campus class. We ask if we can meet with the group, usually at the first or second class meeting, in the library. During that meeting, we explain how library services are provided and we provide instructions for and a demonstration of dialing into the library system and how to search a CD-ROM or online index. If the class is in education, we explain how to obtain a VA Pen account (an Internet WAN for Virginia educators) so that it is easy to dial in to our library catalog and many other databases.

We attempt to make it easy for the student to take advantage of our services. If they are unable to come to our library or if they don't use library services at the host facility (sometimes there were virtually none available), our reference librarians will search both the online catalog and the appropriate CD-ROM databases. The search results are sent to the patron who marks and returns the printouts to the User Services staff who retrieve materials for the students. We send materials by whatever method the student requests, either by fax, by mail or by pickup/courier. At first we asked that teaching faculty be involved in the process by acting as couriers for books, but it became apparent that this would be a cumbersome procedure and it was dropped.

Our efforts were considered minimal in the eyes of the evaluator who looked at our initial procedures back in 1989. However, at the time, the state of Virginia was experiencing budget cuts and we were doing everything we felt we could with the resources available. Moreover, we felt that we were providing off-campus students with more service than we were providing for on-campus students. We would do searches and retrievals for off-campus students at no cost to the student while on-campus students were expected to conduct their own literature searches, retrieve their own materials, and photocopy them at their own expense.

When the *ACRL Guidelines for Extended Campus Library Services* were published in April 1990, we examined them and felt we were in compliance. In 1991-1992, as the SACS self-study was being written and revised, we used those guidelines to describe the service. We were able to present our policies and procedures as viable services to our off-campus patrons. We also identified the key personnel and their role in the provision of the service.

As we established a track record and as other departments began to consider teaching courses off campus, the library became part of the university planning process. With time, and eventually with money, we have moved toward the agreement with the host library model whenever possible.

In the fall of 1992 the chair of the Social Work department informed the University Librarian and the librarian responsible for collection development in that subject area of a proposal to offer courses leading to a bachelor's degree in Social Work at Virginia Western Community College, located approximately 45 miles from the Radford University campus. Under this proposal, which is based on the "2+2" model, students would complete all coursework for a bachelor's degree in Social Work at the community college. During the first two years, lower division and prerequisite courses would be taught by community college faculty. After successfully completing the requirements for an associate's degree, students would then enroll in a program of upper division courses taught at the community college by Radford University faculty.

The target date for starting the program and offering the first upper division courses was set for fall of 1993. During a meeting with the program coordinator, many questions relating to the provision of library resources were discussed in some detail. Because the university was in the later stages of completing the SACS self-study for institutional reaccreditation, the need to satisfy accreditation criteria related to library support for off-campus programs was paramount. We were also aware that whatever arrangements we were to make for providing library services in support of the 2+2 program in Social Work would also have to be in compliance with the accreditation standards established by the Council on Social Work Education. Of equal importance to these accreditation concerns was the issue of funding extended campus library services. Thus, the development of a plan to provide library resources and services and the preparation of a budget identifying both start-up and on-going costs were one in the same process.

Upon learning that Virginia Western Community College had earmarked $3,500 for the acquisition of library materials for the 2+2 program, we arranged to meet with the director of the VWCC library in order to coordinate our planning efforts. Prior to the meeting, we reviewed the relevant criteria in the SACS handbook, *Criteria for Accreditation*, as a framework for our discussion. They are contained in a subsection entitled "Library Resources at Off-Campus Sites" and consist of three brief paragraphs:

> At any off-campus location where credit courses are offered, an institution **must** ensure the provision of, and access to, adequate learning resources and services required to support the courses, programs and degrees offered. The institution **must** own the learning resources or provide them through formal agreements.
>
> Competent library personnel **must** be assigned duties in planning and providing library resources and services and in ascertaining their continued adequacy.
>
> When formal agreements are established for the provision of library resources and services, they **must** ensure access to library resources pertinent to the programs offered by the institution and **must** include provision for services and resources which support the institution's specific programs, in the field of study and at the degree level offered (Southern Association of Colleges and Schools 1992, 48).

Although they are rather general in scope, the SACS criteria nevertheless established a baseline for planning purposes. To address our more specific concerns, we referred to the *ACRL Guidelines for Extended Campus Library Services.* Like the SACS criteria, the ACRL Guidelines also are non-prescriptive in nature and intent. They are designed to outline direction, support a process, stress overall coordination and to support the educational objectives of the extended campus program (ACRL 1990, 354). What was most helpful was the structure they provided, and the ways in which the responsibilities of the library associated with the parent institution were succinctly defined in the key categories of management, finances, personnel, facilities, resources, and services.

The on-site meeting with the director of the VWCC library enabled us to gather some useful impressions of the collection, services, staffing, and facilities, and make an informal needs assessment. Our discussion focused on identifying what was needed to develop, coordinate, and provide library resources and services which would meet the information needs of the students enrolled in the 2+2 program in Social Work and satisfy accreditation criteria. Following the meeting, a formal letter of agreement outlining the role and responsibilities of each library was written and sent to the VWCC library director. A copy was also provided to the program coordinator at Radford for inclusion in the broader, overall agreement between the two institutions. It is neither a lengthy nor complex document; rather, it covers the most basic and immediate considerations in a very direct manner:

LETTER OF AGREEMENT FOR THE PROVISION OF LIBRARY RESOURCES AND SERVICES

The responsibilities for providing library resources and services in support of the Radford University/Virginia Western Community College BA/BS degree in Social Work shall be assigned as follows:

ACQUISITION OF BOOKS AND PERIODICALS

○ VWCC will purchase books which have been identified as part of the core collection of Social Work. Subscriptions to periodicals which support the courses being taught at VWCC will be initiated and maintained by VWCC; in addition, five years of microfiche backfiles for each new periodical title will be purchased by VWCC.

○ RU will purchase books which have been identified as supplementary reading for the Social Work courses being taught at VWCC.

CATALOGING OF MATERIALS

○ VWCC will catalog and process as its property all materials acquired from VWCC funds.

○ RU will catalog and process as its property all materials acquired from RU funds.

LOCATION OF MATERIALS

○ VWCC will shelve the materials it purchases for the Social Work program in its main book and periodical collections.

○ RU will check out to VWCC for one semester the books purchased as supplementary reading for the Social Work courses being taught at VWCC. RU will be responsible for transporting them to and from VWCC. They will be kept on a reserve shelf behind the circulation desk at VWCC. A list of these books will be prepared by VWCC each semester. At the conclusion of each semester, they will be returned to RU, checked in, and shelved in the main book collection.

CIRCULATION OF MATERIALS

RU books on reserve will circulate for a loan period of two weeks, which is the same as that for books owned by VWCC. Renewals will be permitted provided there are no holds on an item. Photocopied materials placed on reserve by RU faculty will have a loan period determined by the faculty member. The overdue fine rate in effect for VWCC materials will apply to RU materials; VWCC will assess, collect, and retain all overdue fine money. In the event that an item must be replaced, VWCC will notify RU. Replacement charges will be determined by RU, with VWCC collecting the amount specified and forwarding it to RU.

AVAILABILITY OF LS/2000

VWCC will designate a public terminal to be used for accessing LS/2000, the RU online catalog. VWCC will install a network board on one of its own online catalog terminals and use the Internet to connect to LS/2000; the Internet address is ls2000.runet.edu. RU will provide instructions for searching its catalog.

INTERLIBRARY LOAN

RU materials identified through the use of the LS/2000 terminal at VWCC may be requested through interlibrary loan. RU will provide special off-campus ILL request forms. VWCC will fax requests for books and periodical articles to RU. RU will fax requested articles to VWCC within 24-48 hours, and will process books for shipment via UPS within 48 hours. VWCC will return books borrowed from RU through ILL by 4th class U. S. Mail.

REFERENCE AND INSTRUCTIONAL SERVICES

Students taking courses in the Social Work program may use any of the resources located in the VWCC reference collection, including CD-ROM databases. These include *InfoTrac, Grolier's Electronic Encyclopedia, and Newsbank*. RU will investigate the cost of purchasing a second subscription of *Social Sciences Index* on CD-ROM for use at VWCC; if funding is available for a second subscription, VWCC will furnish all equipment necessary to set up a public access workstation. In addition, online database searching through the DIALOG information retrieval system will be conducted by a VWCC librarian upon request. A reference librarian will be available to provide personal assistance to students in using library resources. At the request of faculty teaching Social Work courses, a VWCC librarian will give class presentations on library research methods and highlight the Social Work resources available.

Appended to the copy of the Letter of Agreement forwarded to the program coordinator was a preliminary budget plan itemizing the start-up and on-going costs associated with Radford University's designated responsibilities in terms of library support.

RADFORD UNIVERSITY/VIRGINIA WESTERN COMMUNITY COLLEGE BA/BS DEGREE IN SOCIAL WORK BUDGET PLAN

FY92/93

VWCC has allocated approximately $3500 for the purchase of books, periodical subscriptions, and periodical backfiles on microfiche which have been identified as part of the core collection of Social Work. Funding will also be provided by VWCC to establish an Internet connection to RU's LS/2000 online catalog, and to provide equipment for a public access CD-ROM workstation if RU is able to fund a second subscription to Social Sciences Index on CD-ROM.

Funding from RU is required for the following start-up costs:

Purchase of books for supplementary reading	$1,500.00	
Purchase of *Social Sciences Index* on CD-ROM	$1,235.00	(2nd subscription)
Purchase of additional fax machine	$1,450.00	(plain paper)
Installation of telephone line for fax machine	$ 150.00	
TOTAL FY 92/93 COSTS:	$4,335.00	

ON-GOING COSTS

Purchase of books for supplementary reading	$1,500.00	
Social Sciences Index on CD-ROM (subscription renewal)	$1,235.00	
Fax supplies (ink cartridges)	$ 350.00	
Monthly telephone line charge for fax	$ 245.00	(@ $20.34/month)
UPS costs	$ 150.00	
Student assistants (2 @$1,200)	$2,400.00	
TOTAL ON-GOING COSTS:	$5,880.00	

In analyzing the total cost and anticipated revenue based on projected student enrollment, the program coordinator estimated that the library would be allocated approximately $300-$400 per course or about $1,600 per year from the revenue generated by the program. As this amount falls short of the library's own funding projections, it remains to be seen how the gap will be bridged. There are those on campus involved in coordinating other off-campus courses who believe strongly that students enrolled in such courses should pay for access to library and information services. We steadfastly believe, however, that the support provided to the extended campus community should be equitable with that provided to the on-campus community. This is one of the philosophical assumptions upon which the ACRL Guidelines are based. It seems appropriate, therefore, to maintain the position that there shall be no fees for services to off-campus students where none exist for on-campus students.

With this Letter of Agreement in place for the provision of library resources and services for the new off-campus degree program in Social Work, and with our experience to date in actually working with students enrolled in other off-campus courses, we felt guardedly confident that the library was in compliance with the SACS criteria for accreditation, at least in letter if not in spirit. Vague doubts about whether we were really doing enough occasionally entered our thoughts as we wondered what the evaluator on the SACS visiting team would ask and think about our efforts.

As it turned out, our evaluator had no specific concerns about the mechanisms we had set up for providing library support for off-campus courses and programs. He did feel that the library was not being funded adequately by the university for off-campus library support, and pointed out in conversation with us that additional staff should be requested by and made available to the library. In his formal report, these observations were subsumed in more general recommendations about increasing the number of staff and increasing the library's materials budget.

In looking at the *Handbook for Peer Evaluators*, a publication prepared by SACS to assist evaluators in conducting interviews during the site visit, it is clear that each evaluator has considerable latitude in formulating questions and determining the institution's compliance with the accreditation criteria. Suggested questions pertaining to library support for off-campus programs are just as non-prescriptive as the criteria: Is there sufficient library support for any off-campus or external programs? Are the library facilities at all sites adequate to support the purpose of the institution? Does the self-study adequately assess any departmental or unit level collections and services, as well as any off-campus sites or extended locations? Does the self-study evaluate the strengths and weaknesses of contractual relationships with other libraries and learning resource centers? (Southern Association of Colleges and Schools 1991, 54-55).

By their very nature, then, current accreditation criteria validate the development of local strategies for delivering off-campus library support that are flexible and adaptable to the full range of programs offered by the institution. This engenders, in turn, a variety of local solutions to what is really a larger, shared problem. Many models exist for providing access to collections, facilities, and trained staff for students enrolled in off-campus courses and programs. What works for one library may not be feasible for another library. Accrediting agencies don't dictate procedures or advocate one particular model as a standard for all libraries. Yet we believe that unless accreditation criteria do become more prescriptive and more specific about what constitutes excellence in off-campus library support, institutions will not be compelled to provide libraries with the level of funding and the number of staff needed to ensure excellent service.

As our experience demonstrates, it is possible to satisfy accreditation requirements by following the *ACRL Guidelines for Extended Campus Library Services.* The following suggestions are offered as our prescription for a successful accreditation review:

- Be fully aware of not only the institutional accreditation criteria you need to satisfy, but also any accreditation requirements for specific degree programs.

- Take an active role in those university councils and departmental committees which approve proposals for new off-campus courses and programs.

- Communicate and collaborate with the program coordinator and other appropriate individuals on your own campus, and with your counterparts at the host institution.

- Establish formal written agreements outlining the roles and responsibilities of each library.

- Realistically calculate the cost of library support, and be persistent in requesting additional funding.

- Develop and disseminate guides and handouts describing the library resources and services available and how they may be accessed.

- Establish a mechanism for evaluating the services and resources provided to off-campus students, and use the results to justify funding requests and to make needed improvements.

Distance education is a strategic issue for libraries and the institutions they serve; it is an integral part of our broader educational purpose. It is essential that the library's mission statement reflect a clear commitment to distance education, and that its goals and objectives overtly address the information needs of the extended campus community.

Appendix A

McConnell Library Radford University

TO: Students Taking Off-Campus Courses

SUBJECT: Library Services

There are three ways to determine if Radford University's McConnell Library has materials you need for your study and research:

1) Use a personal computer with a modem to search McConnell Library's LS/2000 Public Access Catalog. Write Blair Brainard, Instruction Librarian, Box 6881, McConnell Library, Radford University, Radford, VA 24142, to obtain a copy of "Dial Access to Radford University Library."

2) Call the Reference Desk at (703) 831-5696 to ask about specific library holdings. Reference Desk hours are:

M-TH	8 a.m. - 10 p.m.	SA	9 a.m. - 5 p.m.
F	8 a.m. - 5 p.m.	SU	2 p.m. - 10 p.m.

3) Visit McConnell Library to search the LS/2000 Public Access Catalog. Fall and Spring Semester Library hours are:

M-TH	8 a.m. - midnight	SA	9 a.m. - 5 p.m.
F	8 a.m. - 9 p.m.	SU	noon - midnight

Summer Session Library hours are:

M-TH	8 a.m. - 10 p.m.	SA	noon - 5 p.m.
F	8 a.m. - 5 p.m.	SU	2 p.m. - 10 p.m.

Call the Circulation Desk at (703) 831-5472 to check on hours during breaks.

Once you determine the library owns a needed item, complete the attached **"Patron Registration/Request Form**." If you come to the library and obtain your materials, turn in the registration form at the Circulation Desk. If you do not come to the library, fill out the Request Form as well and mail it to Becky Bostian, Coordinator of User Services, Box 6881, McConnell Library, Radford University, Radford, VA 24142 or fax it to her at (703) 831-6104. Books can be mailed. They usually circulate for a period of four weeks and are renewable by telephone. Journal articles can be mailed or faxed depending on preference.

If the items you need are not available in McConnell Library, an Interlibrary Loan request will be processed for you. ILL requests can take one to three weeks to fill, although most take less time. Some Interlibrary requests may involve processing charges.

Appendix B

PATRON REGISTRATION/REQUEST FORM

Give to professor who should return it to McConnell Library or;
Mail to Circulation Dept., McConnell Library,
Radford University, VA 24142 or; Fax to (703) 831-6104

REGISTRATION

Name:________________________________ Date:__________
Social Security Number:________________________ RU ID Number:__________
Address:____
City:__________ State:______ Zip:_____ Home Phone:________ Work Phone:______
Course Number & Title:________________________________

Professor:____________________ Location:________________

Materials ____Book or ____Audiovisual (check one)

Author:____
Title:____
Series:____________________ Edition:________________
Publisher:__________ Place:______________ Date:____________
Item not needed after:______________________________
Where did you obtain information about this item?__________________

Periodical Article

Title of Periodical:_________________________________
Author:____
Title of article:____________________________________
Volume #:________ Issue #:________Date:__________Pages:__________
Item not needed after:______________________________
Where did you obtain information about this item?__________________
Do you want this article faxed to you?__________YES__________ NO
FAX Number:____

ILL (Interlibrary Loan)

If McConnell Library does not have the item you need, do you want the library to obtain it for you through Interlibrary Loan? ______ YES ______ NO

If yes, fill in the maximum amount you are willing to pay if there is a charge:__________

Sign here to agree to pay any charges:________________________

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Franchising Higher Education: The Library's Role

Peter Brophy
University of Central Lancashire

INTRODUCTION

Franchising has been a feature of the commercial marketplace for many years: some of the successful brand names that have become so familiar across the world, like Kentucky Fried Chicken, Wimpey and, in Britain, Body Shop and Prontaprint, are businesses operating mainly or entirely through franchise outlets. Typical of such businesses are extremely tight central control over the product, the style of outlets and advertising by the franchiser, while the franchisee contributes capital and hence commitment to the enterprise. The franchisee benefits by buying in to an established business, receiving detailed support from the franchiser.

It is perhaps surprising that little has been heard of franchising outside the commercial arena, and Britain is believed to be unique in using the term to describe a particular model of delivering higher education off campus. The features, however, are familiar: the product, in this case a course of study, is owned by the parent university, the franchiser. That university prescribes the content of the course in some detail: the syllabus is largely fixed; the assessment is prescribed - often it will be necessary for all students following the course on or off campus to take the same examinations at the same time; and the award - certificate, diploma or degree - is identical for all. Furthermore there is, or at least should be, firm franchiser control over quality. However, the details of delivery are left with the franchisee, subject to franchiser approval, so that the mix of learning methods employed at any particular "outlet" may well vary. The equivalent of the commercial franchisee's input of capital will be the higher education franchisee's input of accommodation, staff and other facilities, including libraries.

FRANCHISED HIGHER EDUCATION IN BRITAIN

In recent years the provision of higher education through franchised courses has seen enormous growth in Britain and over 50,000 students are now following this route each year. Such courses are franchised by universities, predominantly by the newer institutions, and are usually based at relatively small colleges. A franchised course may involve elements of distance learning, including specially-prepared learning materials, but frequently its learning methods are identical to those employed in mainstream higher education: lectures, tutorials, essays, projects, practical work, and so on. In some cases students attend the parent institution during the course (e.g. for laboratory classes) but this is unusual.

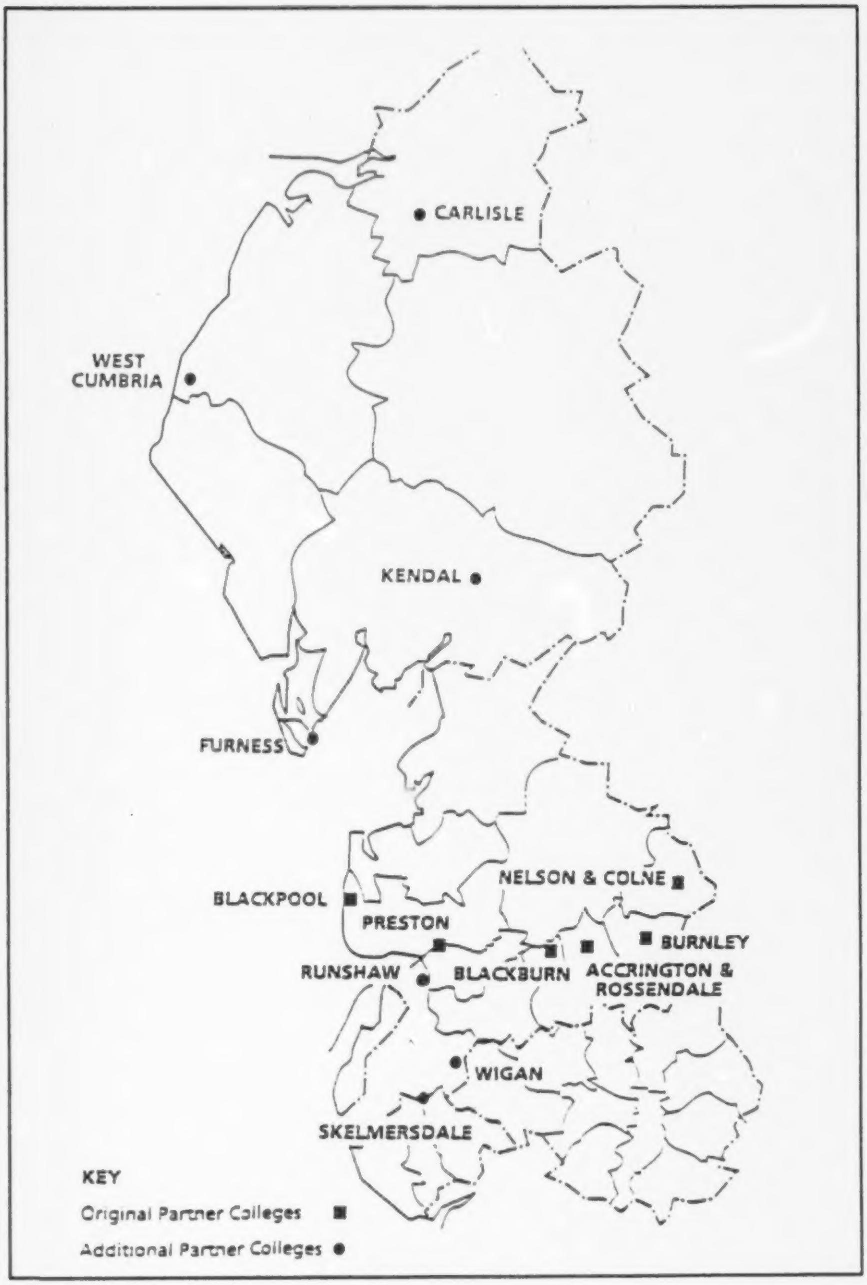
Franchised courses are usually based at relatively small colleges with libraries designed to support technician-level, rather than higher, education. The typical college library has between 15,000 and 40,000 books and anything from 150 to 400 periodical titles. In stock alone it is about a tenth the size of even the smallest university library and reading space and other facilities are similarly restricted, some colleges not even having a professional librarian on the staff. Yet, as we know, the rapid development of student-centred learning in higher education has made access to the whole wealth of recorded knowledge ever more central to the learning process. There could thus be a serious mismatch between the learning resources students following franchised courses need and those available to them. The Library Association in London has published guidelines for franchised courses (The Library Association 1992) which go some way towards a set of standards while recognising that the needs of different courses will vary widely. Brophy (1992) and Revill (1991) have published accounts of the issues as seen from individual institutions, while the British Government's advisers (Her Majesty's Inspectorate) referred briefly to Library issues in a report on franchised courses (Department of Education and Science 1991).

THE UNIVERSITY OF CENTRAL LANCASHIRE PARTNER COLLEGES LIBRARY NETWORK

The University of Central Lancashire is a leader in the field of franchised course provision in Britain. Figure 1 shows the region served by the University, which is situated at Preston in North-West England, about 40 miles North of Manchester. It is an area of great contrasts: Preston itself grew from an important stronghold in the English Civil War of the 17th century to become heavily industrialised and was the birthplace of the temperance movement, the archives of which are held the University Library. The towns of Blackburn, Accrington, Nelson, Colne and Burnley, witnessed the beginnings of the world's first industrial revolution and still contain the legacy of the great cotton mills of the last century: more recently they have seen an influx of ethnic minorities, mainly from India and Pakistan, and now have an ethnically diverse population. In Cumbria, the English Lake District, there is a stark contrast. The coastal areas have population centres which were established through the needs of heavy industry, such as steel-making and shipbuilding, but which are now in decline with high unemployment rates. They are isolated from transport networks although the ethnic mix is more homogeneous than in Lancashire, since they were never great centres for immigrant populations to settle. The rest of Cumbria is very rural, with lakes and mountains and a wide range of holiday provision. However, rural areas have their own types of deprivation and what to the holidaymaker appears a rural idyll in the warmth of a summer day can in the winter all too easily become an almost impossible struggle against isolation and the elements. The common factor that links these areas, and particularly the more disadvantaged populations, is a lack of mobility. In a traditional higher education system this manifests itself in a lack of opportunities to pursue education much beyond school or technician levels.

As can be seen from Figure 1, these differing areas provide bases from which higher education can be offered. Generalist further education colleges at each of the marked towns are complemented by colleges specialising in Art & Design (Carlisle), Agriculture & Forestry (Cumbria) and Agriculture & Horticulture (Lancashire). There are about 2,000 students currently following franchised courses at these centres, with the concentration on Level 1 courses (i.e. the equivalent to the first year of a three year Bachelor's degree programme) offered within a Credit Accumulation & Transfer Scheme

Figure 1


CARLISLE
WEST CUMBRIA
KENDAL
FURNESS
BLACKPOOL
PRESTON
NELSON & COLNE
BURNLEY
RUNSHAW
BLACKBURN
ACCRINGTON & ROSSENDALE
WIGAN
SKELMERSDALE
KEY
Original Partner Colleges ■
Additional Partner Colleges ●

(CATS).

In order to develop the provision of library services to students undertaking franchised courses, a "Partner Colleges Library Network" has been set up. Libraries within the network have committed themselves to cooperate in the following ways:

- Students undertaking franchised courses in the University of Central Lancashire's Partner Colleges are allowed access to any Network library. Where possible borrowing facilities are extended to such users.

- Libraries supply each other with photocopies of printed materials on request using Copyright Licensing Agency (CLA) licence provision. The CLA is a national agency, owned by the publishers, which provides blanket licence coverage to enable limited extracts of books and other printed materials to be photocopied for educational purposes. Similar arrangements can be made for the sharing of other media such as video. Charges between libraries represent cost recovery only.

- Libraries endeavour to provide access to their catalogues, where possible by electronic means, for any user of the Network.

- Library staff make their advice and expertise available across the Network to assist colleagues to meet validation and review requirements and to deliver services. This is particularly important where subject expertise is spread very thinly in some colleges.

- Libraries have committed themselves to consult and advise one another on major acquisitions and seek to avoid unnecessary duplication of provision for higher education students. Some colleges are relatively close together and, although there is an element of competition, are generally willing to assist one another.

- Members have also committed themselves to give consideration to the loan of collections of material where this would not diminish the service offered by the originating library. The intention is to maximise benefit from library investment where a college ceases to teach a particular subject which is still being taught elsewhere. The Network has not been established long enough for us to know if this provision will prove workable: the colleges have recently become independent of local government and are now free to make their own decisions on such matters: in the past they formed part of the local authorities' education departments.

- Efforts are being made to provide access to a wide range of online and CD-ROM databases through cooperative agreements. Copyright and licensing barriers are, however, formidable.

- Libraries negotiate such other cooperative arrangements as may from time to time prove desirable. For example, the Lancashire and Cumbria public libraries offer communications networks which have been used by a number of colleges to facilitate electronic networking, including email and cooperative cataloguing.

The basic concept is to view Library services as a network of resources, with a wide range of delivery points, which is accessible to every franchised course student. While it will take time to achieve a high level of cross-utilisation of resources, the aim is to operate the libraries of all participating institutions as open resources for higher education students on University of Central Lancashire franchised courses. As a start the University has declared that its library services will be open to all such students on the basis of equality with "internal" students.

Access to information can of course be provided in a number of ways, but one vital element of the network is to enable higher education students to become competent in handling information. The University Library has placed a very high priority on the development of information skills programmes and participating libraries are expected to adopt similar objectives. Plans are being developed for the delivery of an information skills module to students on franchised courses. Our view is that the use of a network of resources will be optimised if users are skilled in determining their needs, locating sources of information and using efficient procedures to obtain and use information resources.

Central to the network concept is the commitment to share resources, wherever that is feasible and economic, and recognising that the primary duty of every institution must be to its own students.

INVESTIGATING FRANCHISED COURSE STUDENTS' LIBRARY USE

Very little is known, other than by anecdote, of the adequacy of franchised course students' experience of library services and the comparative position *vis-à-vis* on-campus students. We have studied experience of off-campus services in other countries (Brophy 1992), noting for example the ACRL Guidelines (Association of College & Research Libraries 1986). However, the situation in Britain is unmapped and few qualitative (as opposed to descriptive) studies of direct relevance have been published elsewhere. For that reason the University of Central Lancashire is undertaking a two year research project, funded by the British Library, to explore some of the library issues surrounding franchised courses. The overall aim of this Project is to provide a clear understanding of:

- how library services are being and could be provided to support franchise course students in higher education;
- how these students actually satisfy their information needs;
- what steps need to be taken to ensure that students on franchised courses are not disadvantaged in comparison with students on traditional courses in respect of information and library resources and skills.

Arising from this overall aim a set of sixteen specific objectives has been identified:

SURVEYING THE NATIONAL AND INTERNATIONAL SCENE

1. To survey the provision of library support for franchised courses in British higher education and the specific initiatives being taken by higher education libraries to service such courses (i.e. to view

the situation from the *franchiser* perspective).

2. To survey the college library perspective on franchised courses and the specific initiatives being taken by college libraries (i.e. to view the situation from the *franchisee* perspective).

3. Using the University of Central Lancashire's franchised courses as an exemplar, to document in detail the experience of university, college and public librarians in relation to franchised courses.

4. To follow up selected case studies in higher education institutions and further education institutions, identified in 1 and 2 above.

5. To survey the professional literature and provide both an up-to-date bibliography of relevant sources and a list of potential contacts.

6. To establish contact with professionals working in related fields (e.g. "off-campus" programmes) outside Great Britain. (Hence this paper!)

THE STUDENT EXPERIENCE

7. To investigate the learning methods being employed in franchised courses with particular reference to the implied need for library resources.

8. To investigate the level of teaching of information skills to franchised course students.

9. To interview, survey and follow up the actual experience of a sample of franchised course students in relation to the provision and availability of library resources. This work forms a central core of the Project.

THE NETWORK OF LIBRARY SERVICES

10. Using the University of Central Lancashire Partner Colleges Library Network as an exemplar, but drawing on other initiatives identified in 1. and 2. above, to document novel approaches to library provision for franchised courses.

11. Similarly, to investigate the cross usage of library services by franchised course students.

12. Similarly, to document planned developments in facilities and services for franchised course students and the steps and resources needed to turn these plans into reality.

DISSEMINATION

13. To hold a one-day seminar, half-way through the Project, in order to draw together interested parties and to disseminate interim results.

14. To hold a major conference to disseminate information and to plan further action, towards the

end of the Project.

15. To prepare and publish a final report on the Project, and to disseminate the findings widely.

16. To set up mechanisms to monitor future developments in the provision of library support for franchised courses, enabling good practice to be shared.

At the end of the Project we hope to have a clear understanding of the extent and nature of franchised higher education courses in Britain and to have developed an insight into the student experience. We should then have a firm basis for taking actions designed to improve the level of service provision. In doing so we will draw on another Project at the University which is about to start, as described below.

INTO EUROPE: THE "LIBRARIES WITHOUT WALLS" PROJECT

INTRODUCTION

The second, and even more far reaching, project has recently been negotiated with the European Commission, which will contribute funding of more than $300,000 over an eighteen month period. The European Commission is the executive arm of the European Economic Community and has been responsible for initiating a series of IT-intensive studies under a major initiative known as the "Framework Programme", of which the Libraries Programme is a part. Our own Project, called "Libraries without Walls: the delivery of library services to distant users (BIBDEL)", will research and demonstrate techniques for providing access and delivery of library materials and services to users based at a distance from the physical library. It addresses the needs of the increasing number of Community citizens (especially those in less developed areas) who need access to library materials at a higher education level, yet undertake their learning at a distance from a higher education institution. Information technology provides the means to deliver library services to such users, and hence to move away from the model in which users must always go to a Library.

BACKGROUND AND CONTEXT

Within the Community, higher education is expanding rapidly but without a corresponding expansion of infrastructure. It is unlikely that major new academic institutions will be created and the load will therefore fall largely on existing ones. It follows that there are unlikely to be any major new academic libraries developed on new sites. Yet higher education will have to be delivered to a wide range of "customers" in their own locality. This can only be achieved by a range of variations on distance education, including "open universities", "franchising" higher education to small colleges and other centres in appropriate locations, workplace courses, etc. Over 1,000,000 Community citizens are currently involved in such distance education programmes, while many more study at universities with distributed sites and thus distributed libraries. The need for retraining throughout life will increase the need for education to be delivered to students, rather than the old pattern of students having to go to the educational institution. As noted above this pattern is particularly appropriate in less-developed areas, where investment in new universities will be limited. It is also worth noting that the delivery approach will enable European Community libraries to offer appropriate solutions for the developing countries of Eastern Europe.

Hence, it is the objective of this project to explore the possibilities that IT provides to enable libraries to *deliver* their services across a distance: to take the Library to the user instead of the user having to come to the Library.

The Project brings together partners able to demonstrate different stages of development of IT utilisation (which is typical of the pattern throughout the Community) and different patterns of education delivery (again typical of the Community as a whole). Led by the University of Central Lancashire, with its long experience of franchising, the other partners are Dublin City University in the Republic of Ireland and the University of the Aegean in Greece.

The project intends to demonstrate the use of advanced techniques to provide, in the context of services to remote users,

○ access to library catalogues and enquiry services;

○ delivery of library materials to the user.

The supporting library infrastructure will also be researched to provide a set of techniques applicable throughout the Community and beyond, including

○ management of delivery services for remote users;

○ user and library staff training;

○ cost-benefit and cost-effectiveness issues;

○ the scope for cooperation between libraries in delivering services.

Finally, the project will undertake dissemination of good practice in this area and will explore the setting up of a special interest group to enable librarians to share expertise on an ongoing basis.

We believe that the solutions demonstrated in the Project will be particularly suited to all academic libraries which are having to develop an access rather than a holdings strategy. Although this work is concentrating on distant users, the Project will also have spin-off benefits to small & medium sized enterprises' training and information needs and to part-time on-site students who are currently disadvantaged by the pressure of demands on their time.

The Project will deliver a series of reports, incorporated in a "toolkit" of techniques, on the different aspects of providing library services to distant users so as to enable librarians throughout the Community to introduce services of direct benefit to many thousands of currently disadvantaged learners.

OBJECTIVES

The Project team have agreed a set of eleven objectives for this Project under the broad headings of "Access to the Library " (Objectives 1 & 2), "Delivery of the Library to the User" (Objectives 3 to 5), "Management" (Objectives 6 to 9), and "Dissemination" (Objectives 10 & 11). The objectives are:

1. To identify how users, based at a distance, can be given optimal access to the catalogue of a remote library and to demonstrate a range of effective and efficient options, including online access via different networks, CD-ROMs, etc.;
2. To research and establish IT based enquiry services for such users and to demonstrate solutions;
3. To research the use of IT to enable the delivery of services, including texts, to distant users and to demonstrate a range of solutions;
4. To research the additional problems of delivery of services to the home;
5. To identify the user training implications of remote services;
6. To identify the management issues involved in the successful delivery of services to remote users, including the issue of copyright;
7. To research the cost-benefit and cost-effectiveness of such services;
8. To identify the additional library staff training implications of services to distant users;
9. To identify the issues which need to be addressed to enable effective cooperation between libraries to enhance services to distant users and the possible spin-off benefits of such cooperation.
10. To raise awareness throughout the European Community of the possibilities for delivery of library services to distant users;
11. To explore the setting up of a special interest group for libraries involved in delivery of library services to distant users throughout the European Community.

APPROACH AND METHODOLOGY

The Project is designed to explore, identify and improve the availability and accessibility to the remote user of the services provided by modern library services by demonstrating that library services can be delivered to users at a distance instead of users being required to visit libraries. It recognises that many users who need to study do not have access to the library services they need, that major libraries are inaccessible to a large proportion of the population of the Community and that it is neither feasible nor desirable to embark on a programme of building major new libraries.

Information technology affords an opportunity to make service delivery both practical and cost-effective, but experience of IT utilisation by libraries is spread very unevenly across the Community. Some countries have highly developed networking infrastructure (the new British SuperJANET network, for example, operates with a 620 mbit/sec backbone) while leased lines offering only kilobit speeds may be the best available in some areas of Southern Europe.

In developing the Project methodology, particular note has been taken of a number of areas of Library/IT research and development which offer promising approaches for off-campus service:

- electronic document delivery **between** libraries is becoming well-established, with a considerable research base, standards and even competitive commercial services. The EDIL (Electronic Interchange between Libraries) project is already working in this area within the Libraries Programme, demonstrating the international electronic interchange of documents between the main European library networks;

- the development of "libraries" of electronic texts, of which ADONIS is probably the best example, may offer interesting future prospects for services to distant users, although the emphasis to date has been on on-site usage. Clearly such developments must be explored further;

- the electronic library concept has itself advanced in many ways and all three contractors have undertaken developments of this kind. Work on integrated PC interfaces, for example, is of obvious relevance and the problems created on-campus by direct delivery of services to the user's workstation parallel many of the off-campus issues;

- the University of Central Lancashire Library currently has an operational unit (the Specialised Library Resources Unit) within its library using intelligent character recognition (ICR) technology to create electronic versions of printed documents for blind and partially-sighted students. The extension of this work to distance education does not involve major technical problems, although particular attention needs to be paid to standards.

- standards for electronic document provision are being developed, although with patchy take-up as yet. The Project partners have discussed arrangements with an academic publisher to enable access to a large databank of electronic documents to be provided for test purposes;

- the issue of copyright is in a state of flux, especially in relation to electronic documents, and needs to be given especial attention in the context of off-campus services.

Our approach will be to undertake a first phase of desk research to identify the most appropriate solutions to catalogue access, enquiry services and document delivery. The next phase will involve the design and implementation of demonstration projects at each of the three University libraries. A third phase will draw on the experience of operating these demonstrations to address the user training, staff training, management, cooperation and cost-benefit issues. Finally, a dissemination phase will produce a "toolkit" of appropriate techniques to enable other librarians to design and implement solutions appropriate to their own needs.

It is intended that, as part of the final stages of the Project, a major conference will be held, at which we hope to have international representation This will enable us to disseminate the Project's conclusions, but perhaps more importantly will bring interested parties together to map out a future programme of work in this area. I hope that in so doing we will be able to take an increasingly international view on the ways in which libraries can be taken to their users.

CONCLUSION

The franchised course is one model of off-campus higher education delivery and presents challenges which are by now well known to librarians active in this field. The programme of research at the University of Central Lancashire described in this paper is designed to enable us to improve our understanding of the issues and to find new solutions to the delivery of library services. It is our hope that in so doing we will indeed help to create the "Library without Walls" which truly places the user at the centre of its concerns.

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Costing of Off-Campus Library Services

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Deakin University

INTRODUCTION

The number of courses available in the off campus mode at Australia's universities is undergoing rapid expansion, particularly in the area of postgraduate professional studies. Institutions with little previous experience in providing library service to off campus students are turning to major off campus library providers for advice on services, costing and staffing levels. Libraries are also coming under increased pressure to cut costs, whilst at the same time remaining efficient and continuing to provide high quality services. Operating effective, efficient, services requires a thorough knowledge of the costs involved, but such information is not readily available. Cavanagh (1991) has carried out a preliminary analysis of off-campus library service costs.

Our interest arose from two main concerns:

- ○ the apparent unavailability of papers which discuss methods of costing off campus library services, in particular those which use a delivery service to supply material directly to external students.
- ○ the scarcity of quantitative data for these services (e.g. requests received, items dispatched, satisfaction rate, distribution of requests between undergraduate and postgraduate students) and lack of discussion on how such statistical information can be used for management purposes.

Fritts and Moulden (1991) have commented previously on the first point and noted that the costs of delivering books "have been mentioned in only a few sources". Latham, Slade and Budnick (1991) in their bibliography list some 48 papers under the index heading "budget and finance" and a further four under "time and cost studies" but none of these consider in any detail the costs of delivering books or indeed any other library material, to distance students.

Nor is information to be found in the other major recent review of off-campus library services (Shklanka 1990). Similarly, very few authors provide quantitative data for their library service so that Corrigan's (1990) description of the operation of the University of West Virginia College of Graduate Studies delivery service is of particular interest. It is hoped that our paper will provide some guidance to those who wish to analyse their own costs and will demonstrate the value of maintaining detailed and accurate statistics of all aspects of an off-campus library service.

The paper develops a methodology for analysing costs, based on the off-campus Library Delivery Service operated by Deakin University in Victoria, Australia.

A number of costs are analysed, including:

- The direct cost of supplying a book or audiovisual item, using courier delivery or postage.
- The direct cost of supplying a photocopy of a journal article.
- The cost of satisfying a request for information on a particular subject.
- A comparison of the direct costs involved in servicing an undergraduate versus a postgraduate research student.

Although no two libraries will be identical in the services they offer to off-campus students and factors such as staff salaries and delivery costs will vary from country to country, and indeed, institution to institution, the methodology developed in this paper can be adapted to suit the requirements of a particular institution. Actual costs are given in Australian dollars.

Before proceeding to analyse costings and discuss how data were obtained, it is useful to describe briefly the tertiary distance education scene in Australia and, in particular, Deakin University and its off-campus Library Delivery Service. Throughout the paper the terms off-campus, external and distance education are used synonymously, referring to the mode of education whereby students are not required to attend campus on a frequent, regular basis, if at all, and they receive their study materials and submit assignments by post.

DEAKIN UNIVERSITY AND DISTANCE EDUCATION IN AUSTRALIA

As a result of rationalization by the Australian government in the late 1980s, tertiary off-campus courses were restricted to eight institutions which were designated as Distance Education Centres. Although this concept has recently been abandoned and other institutions are increasingly becoming involved in distance education, the original Distance Education Centres are still largely responsible for off-campus courses in Australia. In 1992, approximately 61,000 (Department of Employment, Education and Training 1992) students were enrolled in off-campus university level courses, representing approximately 11% of the total enrolment.

Deakin University, previously one of the Distance Education Centres, is one of the largest Australian providers of distance education. Like other major providers, Deakin University serves students throughout Australia and overseas. In 1992, over 300 students were studying in overseas countries. Especially in non-English language countries, the Deakin University Library is virtually the only source of additional study material these students have. Off-campus programs are offered at both undergraduate and postgraduate levels and cover a range of subject areas including nutrition, public health, nursing, arts, social sciences, science, engineering, law, education, management, and commerce. Deakin has five campuses - three in Melbourne and two others in the regional Victorian cities of Geelong and Warrnambool. In 1992 Deakin University had an enrolment of 23,500 students, of whom one third were off-campus.

The major means by which Australian universities provide access to the resources of their libraries for off-campus students is by delivery services. Although there are some differences, the services are basically similar, with library materials being despatched by courier or post to the student. Differences relate to use of toll free phone numbers, prepaid return postage, charges for photocopies and the incorporation of a Library delivery service charge in enrolment fees. Crocker (1991) gives a detailed description of off-campus library services in Australia.

DEAKIN UNIVERSITY OFF-CAMPUS LIBRARY SERVICE

The off-campus Library Service operated by Deakin University is the largest in Australia, with 58,000 requests being received in 1992 for materials and information at the two campuses offering off-campus library services. At Geelong 49,000 requests were processed, whilst at Warrnambool there were 9,000 requests. Features of the service include:

- Requests are received by phone, fax, mail, electronic mail, or by dial-in access to the catalogue.
- Items available for loan are despatched within 24 hours of receipt of the request, mostly by express courier.
- Prepaid return satchels are provided for the return of items to the library.
- Photocopies of journal articles are provided free of charge.
- Subject requests are carried out by reference librarians.
- Materials are despatched from whichever campus holds the item, not just the campus receiving the request.
- A success rate of 92% was achieved in fulfilling requests in 1992.
- All off-campus students pay a compulsory Library Delivery Service fee ($26 per year in 1992) as part of their enrolment fees.
- There are no charges for individual transactions.

Deakin University has libraries on all five campuses, holding a total of 850,000 monographs and some 10,000 journal titles, all of which are on the Library's Innopac catalogue. Apart from collections such as the Reference and Reserve collections, all items are available for loan to both on- and off-campus students. There is no separate collection for off-campus students. The essential philosophy underlying the service offered to off-campus students is that they have the same rights to access the Library's resources and services as on-campus students and that they should suffer minimum disadvantage because they are studying at a distance and may not have access to a library. If they cannot get to the Library we take the Library to them.

It is important too, that there should be no financial disincentive which would limit a student's use of the Library and its resources. Thus, there are no direct charges for any of the services provided and prepaid courier satchels are provided for returning books and audiovisual items to the Library. The latter benefits the Library too, as items are returned promptly and can be circulated more often and for shorter loan periods, reducing the number of multiple copies which need to be held.

To facilitate access to the Library, students are encouraged to place requests electronically, either by electronic mail or by using the request facility when dialling in to the Innopac catalogue. Of course, they can also place requests by fax and phone, as well as by mail. Ordering materials is one thing, but response to the orders must be speedy. Items available for loan are dispatched within 24 hours - same day if the request is received before 11.30am. To ensure that items are delivered as quickly as possible most parcels are delivered by express courier, and arrive in major cities the next day.

Deakin presently offers in excess of 600 subjects in the off-campus mode at all campuses and over 400 at Geelong. Many of these are also studied by on campus students. Off-campus students receive a package of study materials which includes lists of prescribed textbooks and recommended readings, and may contain extensive bibliographies. The Library checks reading lists for all subjects against the catalogue and attempts to acquire all listed material in adequate numbers, whether the unit it is offered in the off-campus mode only or in both the off and on campus modes.

Lecturers are expected to put on Reserve photocopies of journal articles required by students, if the journal is not held by the Library. Such Reserve articles are available to on-campus students and are photocopied by Library staff when required for off-campus students.

Deakin University follows the recommendation of the Ross Report(1990) which states that "higher education libraries should aim to provide at least 90% of materials recommended for their courses" and applies it equally to off and on campus students.

The analysis of costs described in this paper is based on the Geelong Off-Campus Library Service. One of the major reasons for restricting this study to the Geelong service was that Deakin University at Geelong has a much higher proportion of students engaged in postgraduate studies and more closely resembles the older, established universities in Australia.

Table 1 gives a brief outline of the Off-Campus Library Service at Geelong in 1992.

TABLE 1 **Deakin Off-Campus Library Service, Geelong - 1992**
The Year at a Glance

STAFF

- 5 involved full time (1 librarian, 2 library technicians, 2 clerks)
- Clerical staff equivalent to two full time people assisted with packing, retrieving journals and photocopying
- Reference staff required 618 hours to handle 1,614 subject requests

STUDENTS

- 3,836 undergraduate and honours
  2,287 postgraduate and higher degree
  6,123 students in total

TRANSACTIONS

*	Requests received		49,126	
*	Items sent	Books	30,804	+
		AV	1,343	
		Photocopies	13,791	+
*	Subject requests		1,614	
	Time to carry out		618	hours
	(+ includes an estimated 4,200 books and 970 photocopies sent in response to subject requests)			
*	Interlibrary loan requests		3,042	
*	Courier parcels sent		17,078	++
	(++ double this to include return parcels)			
*	Other mail items (reports, photocopies etc.)		13,500	

METHODOLOGY

The methodology for analysing costs adopted at Deakin University was to assess the staff costs involved in processing the various types of requests and to add to this other direct costs such as courier costs, interlibrary loan costs, etc. From the totals obtained the average costs of processing a book request, a photocopy request and a subject request are calculated. The information is used to compare the cost of servicing an undergraduate and a postgraduate student.

One of the major components of the cost of an off-campus delivery service is the staff cost involved in supplying items and performing reference requests. Staff costs can be assessed by measuring the times taken for the various stages involved in processing requests. This can be quite complicated. Even the act of responding to a simple book request can be quite complex and time consuming.

The steps that were taken at Deakin University Library are recorded below. Staff involved were asked to record the time they took to complete various tasks on a batch basis, e.g. opening the mail, retrieving books, discharging and reshelving books. The timing process was repeated several times a week over a number of weeks and the average time for each individual task was calculated. The time was also recorded for associated activities, e.g. placing holds on books, sending reports to students (e.g. for items not held) and for recording statistics. The actual staff costs involved were calculated by multiplying the time involved by the hourly salary rate, which included on costs. The total cost per item or per request was obtained by adding delivery costs (courier and/or mail) and other costs such as online database search costs involved in subject requests.

A library-developed computer software package is used to record statistics for all transactions. Details, such as whether the item supplied was a book, photocopy or audiovisual tape, whether a reservation was placed, whether an alternative was sent, if it was a subject request and the time taken, whether the request was supplied as an interlibrary loan, as well as information about unsatisfied requests, are all able to be recorded against individual subject or unit codes. The records are cumulated monthly and then yearly and the statistics obtained proved invaluable for this project. Not only were totals for any category readily available but the breakdown enabled us to separate out requests from postgraduate and undergraduate students and thus calculate the relative costs of each.

The breakdown of student enrolments was provided by the Student Administration section at Geelong.

COSTING OF BOOK REQUESTS

Table 2 shows the times required for processing book requests.

TABLE 2 **Average Times (in minutes) for Various Tasks - Book/AV item**

	Mins per item
Receive requests (about one third came by phone)	0.7
Assign call numbers and sort forms	1.0
Retrieve books and sort	1.0
Charge out	0.8
Packing	1.0
Unpack, discharge and reshelve	1.5
Total	6.0 min.

Table 3 shows the total direct cost of processing a book/audiovisual request, based on the total number of items despatched in 1992.

TABLE 3 **Total cost of supplying a book/AV item.**
(See appendix for fully detailed calculation)

Cost of processing (shelf - student - shelf)	$ 39,763
Cost of preparing reports, doing statistics etc.	$ 5,115
Cost for books sent as a result of subject requests	$ 3,164
Postage and courier costs	$158,341
Total	$206,383
Average cost per book/AV sent (32,145 items)	**$6.42**

It should be pointed out that these figures are **direct** costs, that is the costs incurred when a student does not visit the Library in person, with no allowance for overheads, other than in the salary component. It is obvious that delivery costs are a very large part of the cost of sending a book from Deakin University Library - 74% in fact. It is this factor which allows for greatest variation according to the delivery method chosen by an institution and the courier/postage costs operating in a country. Choices to be made by an institution include whether to send items by mail or by an express courier service, and whether to provide a prepaid return envelope.

COSTING OF PHOTOCOPY REQUESTS

For processing photocopies, many of the same steps apply, although there is the additional cost of making a photocopy (staff time and photocopy costs). However, photocopies at Deakin are generally sent by ordinary mail which is a lot cheaper than the courier delivery used for books.

At Deakin about 25% of the total requests received are for photocopies of journal articles. These are divided into roughly 50% paper format, 25% in microform, and 25% are articles held in the Reserve collection. Because of the slowness in handling microforms and their higher copy costs, copying from microform is considerably more expensive than copying from paper. The average length of an article was determined from a survey of several hundred requests to be 11 pages and calculations are based on this figure.

Table 4 details the times required for the various stages of processing a photocopy request while Table 5 shows the direct costs of supplying articles from three types of originals.

TABLE 4 **Average Times (in minutes) for Various Tasks - Photocopies**

	Hard copy	**Micro-form**	**Reserve copies**
Receive requests and assign call numbers	2.5	2.5	1.0
Retrieve items	2.0	2.0	1.0
Photocopying (average 11 page article)	3.0	6.0	1.5
Reshelving	2.0	1.5	1.0
Packing and addressing envelopes (average 2 photocopies per envelope)	1.5	1.5	1.5
Total time	**11.0**	**13.5**	**6.0**

TABLE 5 **Total cost of supplying a photocopy**

	Hard copy	**Micro-form**	**Reserve copy**
Number of items	7,140	3,450	3,200
Cost of processing	$14,549	$9,352	$3,359
Cost of photocopies	$6,700	$10,577	$3,525
Cost for photocopy component of subject requests	$1,176	$800	-
Cost of doing statistics and filing forms for copyright	$1,850	$925	$925
Postage and packing	$3,757	$1,915	$1,715
Total cost	$28,032	$23,569	$9,524
Average cost	**$3.78**	**$6.83**	**$2.97**
Overall average (13,790 items)	**$4.43**		

COSTING OF SUBJECT REQUESTS

These are requests from students for information on a particular subject, either to assist with an assignment for coursework or for postgraduate research. Most subject requests are handled by reference librarians and involve extensive searching for relevant materials. However, straight forward requests e.g. "a couple of books on *Hamlet*" are handled by the Off-Campus staff and are not included as subject requests. About 20% of the 1,614 subject requests processed in 1992 resulted in a database search, either online or on CD-ROM. The staff time spent on each subject request is recorded, and in 1992 averaged 23 minutes, resulting in a staff cost of $15,000 for the year. Together with courier and postage costs estimated to be $6,000, and other costs, including online search costs, the total cost of processing subject requests was $26,800.

The average cost of a subject request was thus $16.60.

THE COST OF SERVICING UNDERGRADUATE VERSUS POSTGRADUATE STUDENTS

Pass and honours degree students are classified as undergraduate, while Graduate Diploma, Masters Preliminary, Masters by Coursework, Masters by Research and Ph.D students are classed as postgraduate. The last two groups gain their degrees solely through research and are referred to as higher degree or research students, whilst for honours students and the other categories of postgraduates, coursework constitutes a significant, and in some cases the total, content of the degree.

At Deakin all postgraduates and honours students are eligible to obtain interlibrary loans for their research projects. The average cost of an interlibrary loan was estimated to be $20. This includes both the charges paid to supplying libraries and document suppliers and the staff costs involved at Deakin University in processing interlibrary loan requests.

Undergraduates made the most requests and received the bulk of the items. They generated about 67% of the requests, borrowed 78% of the books and audiovisual items which were lent, and received 60% of the photocopies, as well as making 67% of the subject requests. Table 6 below shows how costs varied between undergraduate and postgraduate students.

TABLE 6 **Direct costs for undergraduate versus postgraduate students**

	UG (and Hons.)	PG (All)	PG (Research only)	Average
Books and AV	$159,832	$46,540	$9,649	
Photocopies	$35,765	$24,364	$5,494	
Subject requests	$10,136	$4,928	$887	
Interlibrary Loans	$6,210	$46,016	$36,520	
Miscellaneous costs*	$4,892	$2,408	$732	
TOTAL	$216,745	$124,256	$53,282	
Requests Received	32,923	16,203	4,924	
Costs per Request	**$6.58**	**$7.67**	**$10.82**	**$6.94**
Students enrolled	3,836	2,287	203	
Cost per student	**$56.50**	**$54.33**	**$262.47**	**$55.70**
Students using Off-Campus Service	2,110	458	81	
Cost per student using service	**$102.72**	**$271.30**	**$657.80**	**$132.80**

*e.g. costs of processing unsatisfied requests, computer searching, sending reports, doing statistics etc.

Whether one uses, as a measure for comparison, the cost per request, the cost per enrolled student or the cost per student using the library service (only about 42% of students use the delivery service) it is clear that it is much more expensive to service postgraduate students. This is especially so for Ph.D and Masters by Research students, who cost nearly seven times as much to serve as undergraduates.

TOTAL COST OF AN OFF-CAMPUS LIBRARY DELIVERY SERVICE

As well as knowing the cost per unit of supplying items and services it is obviously necessary for budgeting purposes to know the total costs involved in providing an off-campus delivery service. In addition to staff, delivery and photocopy costs, a number of other factors need to be considered in order to estimate the total cost to the library of operating a service such as Deakin's, including:

- collection building costs
- printing of guides, brochures etc.
- phone and fax costs
- computer costs
- depreciation of equipment and furniture
- heating, lighting, etc.

In this paper the collection building costs are not assessed, because the whole of Deakin University Library's collection is available to both off-campus and on-campus students and it is difficult to apportion relative costs. However, during 1992 over 1,200 titles were ordered to support off-campus courses, many of them in multiples, at an estimated cost of over $70,000.

Printing expenditure was assessed at $4,500. The bulk of that cost was incurred in printing the *Library Guide for Off-Campus Students*, a twenty page publication which is distributed to all off-campus students. An allowance of $3,000 was made for phone and fax costs (for libraries with a toll-free number, the cost would be much greater than this). A value of $6,000 was put on the full set of study guides and readers for Deakin units which is held by the off-campus section for their own use in servicing off-campus students and which is updated regularly. Furniture and computer costs were depreciated over five years. Finally, no figures were included for such outside factors as the cost of heating, lighting, air conditioning and building maintenance because such data were not readily available.

The final costs were assessed at $202,000 for staff salaries with a further $255,000 being expended on non-salary items. Again it is emphasized that these are the direct costs of maintaining a special section to service off-campus students. At $74.64 for each enrolled student, $457,000 is not expensive and came to a little over 12% of the Geelong campus library budget for 1992. Moreover, the Library received over $160,000 from the library delivery fee ($26 per year in 1992) which is paid by all off-campus students and this further reduced the cost to the Library of maintaining the service.

DISCUSSION

This paper is primarily concerned with presenting a method of costing an off-campus library service based on the direct costs of suplying items and the staff costs involved. The data obtained have proved valuable in estimating and monitoring expenditure at Deakin University. Knowing the costs of delivering books and photocopies, and of providing a reference request service has been utilized in improving the efficiency of various aspects of the service. For instance, the data for photocopying costs showed the very high cost of copying from microfiche and microfilm, while copying from photocopies held in the Reserve collection, especially using high speed photocopiers with document feeders, is the cheapest way of providing copies. We ensure, therefore, that heavily used articles are held on Reserve.

As well as improving the efficiency of operations, a knowledge of the costs involved has been utilized in introducing library delivery services for new groups of clients. Deakin University is a major provider of subjects for the Open Learning Agency of Australia which commenced in March this year. The Library receives a limited, inadequate amount of funding towards the cost of providing library service to Open learning students, most of it on a per-capita basis. A thorough understanding of the costs involved, together with a knowledge of the likely usage patterns has enabled us to set realistic fees for subscription to the library delivery service. Winter and Cameron (1983) reported that in Australia only about 40% of off-campus students use their institution's library, either in person or by delivery and that many choose to use the libraries of other institutions (free reciprocal borrowing is available at most institutions in Australia) and/or other libraries, particularly public libraries and libraries at their workplace.

Statistics from the Off-Campus Library Service at Deakin confirm that only about 42% of eligible students use the service. This fact has been taken into account in setting fees for Open Learning Library Service.

The data for the costs of undergraduate versus postgraduate students is useful in establishing and quantifying the cost differential between these two groups. Postgraduate research students are expected to be expensive to service but there is often little hard data on which to base such an assumption. Our data shows clearly that, for Deakin University at least, they are nearly seven times as expensive as undergraduates and that most of this is accounted for by the cost of interlibrary loans. It is possible, however, that in a larger library with a broader collection, the cost difference would not be so great.

CONCLUSION

This paper develops a methodology for providing meaningful data on the costs associated with providing an off-campus library delivery service. The focus in this study is on direct costs of providing service, that is those costs which are not incurred when a student uses the library in person.

Although based on Deakin University Library's off-campus service, the methodology developed can be adapted to suit any library. Libraries may wish to extend the model by including other costs, in particular, collection development costs.

Information obtained this way is useful for monitoring costs on an annual basis and for improving the efficiency of services provided. In addition, knowledge of costs involved and likely expenditure are essential when planning and developing new services.

Appendix

Detailed Costing of Providing a Book

The following factors are included in the direct cost of sending a book:

Times to process the request, assign a call number, retrieve the item and charge it out, pack, and unpack it on its return, reshelve, place a hold where necessary and prepare a report to notify the student, and record statistics. The cost of delivery must also be included. In addition, some books arise from subject (reference) requests with different cost factors eg. the books are retrieved by the Reference staff but Off-Campus staff are still required to charge the items out, and pack, unpack and shelve.

From 49,126 requests, 32,145 books and audiovisual items were dispatched during 1992. It is estimated that 4,200 books arose from subject requests, leaving a nett 27,945 to be fully handled by the Off-Campus staff. NOTE: The salary figures are average hourly rate.

Book requests:

Process requests, retrieve and charge $= \left(\frac{3.25}{60} \times \frac{27{,}945}{1}\right) \times \underline{\$15.50} = \$23{,}462$

Pack and unpack $= \left(\frac{1.5}{60} \times \frac{27{,}945}{1}\right) \times \underline{\$14.00} = \$9{,}781$

Reshelve $= \left(\frac{1}{60} \times \frac{27{,}945}{1}\right) \times \underline{\$14.00} = \$6{,}520$

Subject requests:

Charge, pack, unpack and shelve
4,200 items $= \left(\frac{0.8}{60} \times \frac{4{,}200}{1}\right) \times \underline{\$15.50}$

$+ \left(\frac{2.5}{60} \times \frac{4{,}200}{1}\right) \times \underline{\$14.00} = \$3{,}318$

Placing holds:

3,451 holds were placed, which required one minute each to place and and minute to prepare a report.

Cost $= \left(\frac{2}{60} \times \frac{3{,}451}{1}\right) \times \underline{\$15.50} = \$1{,}783$

Postage for hold reports = 3,451 x 45c = $1,553

Statistics:

Inputting statistics @ 5 per minute

Cost $= \left(\frac{2}{600} \times \frac{27{,}945+3{,}451}{1}\right) \times \underline{\$17.00} = \$1{,}779$

Courier Postage:

Preparing postal satchels = $1,187
Total postage bill = $157,000

Total cost = $206,430
Average cost per book/Av (32,145 items) = $6.42

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Off-campus Students' Perceptions of the Effectiveness of Library User Education

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In January, 1990, Central Michigan University's Michigan Metropolitan region (MIMET) began to offer MSA 600, a course in administrative and research methods, as a foundation to the core courses for the Master of Science in Administration (MSA) degree. The course is designed to acquaint students with research processes and tools used in selecting and developing a problem, project, or issue for analysis. An important component of this course is the literature review. Off-campus librarians conduct a bibliographic instruction session which can be described as an interactive module outlining the steps involved in the review of the literature.

This paper will examine the effectiveness of library user instruction to off-campus graduate students in an administration curriculum. A user evaluation survey was administered to students who have completed the MSA degree program. The findings of this survey were analyzed to determine the value of the library use component to successful completion of assignments in subsequent courses and the final integrative project.

BACKGROUND

Central Michigan University Extended Degree Programs (EDP), offers both undergraduate and graduate courses in approximately 55 centers throughout the United States, Canada and Mexico. Seven professional librarians work with off-campus students and faculty to provide reference and referral assistance, and bibliographic instruction.

The provision of library use instruction is one of the important functions of Off-Campus Library Services, (OCLS). As outlined in the Mission and Goals statement, OCLS librarians "Instruct users about systematic methods of identifying, retrieving, and using information; and develop and distribute instructional materials to facilitate the acquisition of information and research skills" (Central Michigan University 1988). During fiscal year 1991-1992, OCLS librarians provided library use instruction to 3,843 students in 150 classes program-wide.

CMU Extended Degree Programs supports OCLS in its effort to provide library instruction. The MSA 600 Model Course Outline lists within its Outline and Assignment Schedule Class Session 4 "Reviewing the literature..library resources and procedures by videotape instruction, librarian, course assignments, etc." (Central Michigan University 1990). The outline recommends to all instructors teaching the course that a library component be provided which instructs students on topic selection and focus, search strategy, and conducting the literature review. In addition, the *CMU Library Guide* is listed as one of the required course textbooks.

The CMU MIMET librarians established two goals for the bibliographic instruction module for the MSA 600 course:

- To enable students to perform a review of the literature.
- To enable students to effectively use the CMU library services.

Based on these goals the primary objective of this session is the creation of the beginnings of a bibliography which can be used for a research project proposal developed in this course.

Students are required to attend a two and one half hour bibliographic instruction session and must usually make provisions if this is not possible. The class size ranges from 10-34 graduate students.

A variety of instructional methods are used for conducting these bibliographic instruction sessions. The librarians feel this variety is important to create and maintain student interest; to address the different learning styles students' possess; and to use the most effective method based on the material presented. The instructional methods used represent each of the three categories described by Svinicki and Schwartz (1988) as "The Direct-to-Indirect Continuum".

Lecture (direct instruction) is used to provide an overview of the literature review and to describe other basic principles. Most of the bibliographic instruction session involves active participation of the students. The librarian demonstrates or describes a procedure which is immediately followed by a task performed by the students (semi-direct instruction). The students, using their own topics simulate the steps involved in a review of the literature. They develop a problem statement, devise a search strategy, discuss the role of monographic sources, and use periodical indexes (brought to their class) to research their topic. The lecture and demonstrations are supplemented by handouts, an exercise sheet, and a guidebook (*CMU Library Guide*). Brainstorming and discussion are encouraged (indirect instruction) at various points in the session. The session usually ends with an overview of CMU's library services and how they can be utilized to complete course assignment for MSA 600 and subsequent courses.

While the librarians felt that this course and particularly the bibliographic instruction session would strengthen individual research abilities and skills, we wanted to determine if students shared this opinion. King and Ory (1981) state, "The most prevalent of the methodologies currently in use for evaluation of instruction programs is the questionnaire designed to elicit the opinions and perceptions of students and/or faculty concerning the value of instruction, the quality of presentation, the relevance of content, and attitudes toward the library." We developed a survey instrument with two objectives in mind:

- To examine the effectiveness of library user instruction of off-campus graduate student in an administration curriculum.

○ To determine the value of the library use component to successful completion of assignments in subsequent courses and the final integrative project.

The survey consisted of 21 questions using the Likert Scale model. The first few questions were intended to obtain demographic information. Questions 3-7 focused on the number of years since the completion of the undergraduate degree, and experience with bibliographic instruction. Questions 8-11 assessed the impact of bibliographic instruction on the completion of course assignments. Questions 12-15 focused on the methods of presentation. Questions 16-17 addressed the effect of the BI presentation on student library skills. Question 18 asked how BI impacted the student's ability to use CMU's library services. Questions 19-21 were open-ended, providing the students an opportunity for comments.

The librarians surveyed all off-campus Michigan Metropolitan (MIMET) graduate students who had matriculated during the 1992 year. A cover letter, survey, op-scan sheet, and return postage paid envelope were mailed to the 583 graduates. Two hundred thirty-six completed surveys were returned. The data was analyzed by the CMU Computer Services Department using SPSS.

RESULTS

There were slightly more female respondents than male respondents, the majority of which were employed by corporations (profit/nonprofit, 80.8%). Respondents employed by government and educational institutions were almost evenly represented. The graduate area of concentration most represented was General Administration (78.4%), followed by Health Services Administration (15.3%), Human Resources Administration (5.1%), and Public Administration (.8%). It is interesting to note that the years since the completion of the undergraduate degree depicted two extremes. It had been under one year since 30.5% of the respondents had completed their undergraduate degree, while 48.3% indicated that it had been six years or more since the completion of this degree.

To our surprise, only 43.2% stated that they had received library instruction in their undergraduate program, while 54.2% stated that they had not. Respondents indicating that they had not received library instruction in their undergraduate program seemed to represent the group who had completed their undergraduate degree 6 years or more ago (62.5%). Are we to assume that library instruction is now emphasized more in the undergraduate curriculum, or that possibly undergraduate library instruction did not make a great impact on the respondents?

The questions included in the next part of the survey were posed to assess the impact of the library instruction presentation. We wanted to ascertain if the library instruction presentation was useful in the completion of assignments for the MSA 600 course, and also analyze the transferability of this knowledge to subsequent courses. One hundred thirty of the 236 respondents received a library instruction presentation in the MSA 600 course. Of this group, 97.6% "strongly agree" or "agree" that the library presentation should be a required component. As students progressed in the program, their perception of the usefulness of the library instruction presentation to the completion of course assignments increased.

USEFULNESS TO COMPLETION OF COURSE ASSIGNMENTS

(Strongly agree or agree)

○	91.3%	MSA 600
○	94.4%	Subsequent course assignments
○	96.1%	MSA 685 (Final integrative project)

These statistics were supported by student comments such as..."this allowed me to effectively complete assignments throughout my graduate studies!"

Whereas students had strong favorable opinions about the usefulness of the library presentation in the completion of course assignments, students did not feel as strongly about their knowledge of specific library resources ("strongly agree" 36.5%, "agree" 50.8%), and confidence as a library user ("strongly agree" 30.2%, "agree" 45.2%) as a result of this presentation. It would be interesting to further investigate the reasons for these responses.

We also wanted to determine if the students felt that the methods of presentation were effective in the teaching of library skills. The majority (91.2%) "strongly agree" or "agree" that the methods were effective. When asked about two components of the presentation, in-class exercises and instructional materials, 73% felt that the in-class exercises helped them to understand the steps involved in a library search strategy, while 94.4% stated that they were able to use the instructional materials in the completion of MSA 600 and/or other course assignments. Of the two components, student comments seemed to favor the use of the instructional materials over the in-class exercises. Survey responses also indicated that the amount of time spent on the library presentation was "just right" however, several student comments suggested lengthening the presentation (e.g. a mandatory 3-4 hour session or a two day back-to-back presentation.)

Another way that we measured the effectiveness of library user instruction was to look at student ability to utilize library services. A majority of the students, (88.8%) felt that they were better able to utilize the CMU off-campus library services as a result of the library presentation. In effect, our MSA 600 goal of enabling students to effectively use the CMU off-campus library services was achieved.

We concluded our survey with open-ended questions so that we could better make suggestions for improvement by eliciting not only what was helpful, but also what was least helpful about the library presentation. We received an overwhelming number of comments including: the information was covered in undergraduate library instruction and therefore redundant; a request for an invitation to alumni to use the off-campus library services; format suggestions such as a two-stage presentation (novice and advanced), or a 10 minute video; and the provision of flashcards with critical use instructions. One student even suggested eliminating the MSA 600 course, but maintaining the library instruction presentation!

RECOMMENDATIONS AND CONCLUSIONS

"Effectiveness is a measure of whether methods produce the change we desire. We try to find out how well our educational efforts are achieving the intended results" (King, 1983). Based on the results of our survey, library user instruction in MSA 600 was effective. Students understood the steps involved in a library search strategy and found the instructional materials valuable. Students were also better able to use the CMU Off-campus library services as a result of the presentation. Finally, survey responses demonstrated that the session was useful to the completion of course assignments.

We would like to build upon a program that was positively received by our off-campus students. Recommendations we propose include:

- ○ To provide additional in-depth workshops or mini-sessions focusing on one specific aspect of library instruction(i.e., search strategy, using periodical indexes, the on-line card catalog) for students desiring further instruction.
- ○ To incorporate computer technology in the library instruction presentations. Plans are already underway to use a data-display unit for on-site demonstrations of CMU's on-line catalog and databases mounted on CMU's mainframe.
- ○ To conduct a survey of faculty perception of the value of library instruction to augment the findings of this study.

By surveying student attitudes towards library user instruction, we were able to gauge its effectiveness and its value in the completion of course assignments. In an effort to promote continuous improvement, library instruction should be evaluated, using one or more methods, at regular intervals.

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Indiana Links Its Citizens to Libraries

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Almost twenty years ago the libraries of Indiana began working toward a shared vision of an automated network for resource sharing which would enable Hoosiers to satisfy their myriad information needs. As those of us who are involved with distance education know, the importance of such a network for off-campus students cannot be overestimated. This project is finally reaching fruition. The timing of the full implementation of this network could not be better. Although the two initiatives are unrelated, Indiana is now heavily involved in a totally new distance education effort via satellite which will begin to be implemented this fall.

The creation of this automated network has been a massive effort. For more than ten years, the libraries of public and private colleges and universities, public libraries, the state library and library agencies in Indiana have engaged in the largest collaborative effort in the history of those institutions. Their goal has been to automate library collections and link the resulting electronic library catalogs of each institution. Not only does this network facilitate resource sharing but it enables all students, faculty, and citizens of Indiana to access easily and seamlessly the catalog databases of participating libraries. Ultimately this means that a major part of the fifteen million cataloged items held by these Indiana libraries will be accessible electronically to Indiana residents.

The project has had far more than its share of roadblocks, reversals, and seemingly insurmountable obstacles. Its success today is a monument to the determination, vision and planning of the deans of those libraries and to the thousands of hours of hard work, creativity, ingenuity, and skill of the library staffs. Behind them has been the support of the university presidents and the Indiana legislature.

The major universities are Indiana; Notre Dame, Indiana State, Ball State and Purdue. In the early years of this effort, only Purdue had an electronic catalog, a home grown cataloging system that had been created at the university. In the early 1980's Indiana University had begun working with a new library automation company in a collaborative effort to build a unique system. After several years of hard work on the part of the library staff and the company's programmers, before the computer program was ready, the company went bankrupt.

IU then had to evaluate existing mainframe based electronic library programs which could run on its mainframes. After much analysis and debate NOTIS was selected. The installation of NOTIS at IU became the largest and most complex in the United States. The collections in more than thirty libraries, including branches and professional libraries, would be accessible in a single database. Ultimately Indiana State, Ball State, Purdue, and Notre Dame would also adopt the NOTIS software.

A new network, the State University Library Automation Network (SULAN), was created in 1987. The fourteen academic institutions in this network use NOTIS for their electronic catalogs. The other private colleges in Indiana are also engaged in their own electronic database project which will also be linked to the SULAN libraries.

Once the system was installed at Indiana University, patrons in the library, on campus, and at remote sites can log into their campus mainframe and access the catalog. Access is not limited to users who are affiliated with the university. No password is needed so anyone with a computer and a modem or access to the Internet now could examine the holdings of one of the largest academic libraries in the nation. Statistics measuring interlibrary loan activities between the IU libraries attest to the immediate impart this resource has had for students. At IUPUI Columbus, the smallest general branch library, interlibrary lending has trippled to more than one thousand requests annually, and borrowing has doubled to four thousand requests annually. Requests from non-students who are accessing the catalog through their computers became significant source of requests. With each installation of NOTIS at one the major universities, Indiana had already taken a major step forward for its citizens.

The next step was to enable users to access the other university libraries just as easily as they use their own. PACLink makes this possible. PACLink is a newly developed NOTIS application which provides this link. Patron simply select the desired catalog from the initial menu of their home library's electronic catalog; the computer seamlessly accesses the remote catalog. The screen formats, help screens and the commands are those used by the home catalog. One of the features of NOTIS is that it permits each library installation to design its own screens. PACLink searches the remote library and displays the resulting information in the screen format used at the home library. As everyone who searches multiple electronic catalogs knows all too well, interpreting the information and learning the local commands are often the biggest problems in using another library's catalog. If, for example, an IU patron used telnet or a modem to access Purdue's catalog directly, the patron would have to use Purdue's commands and view the resulting citations in Purdue's screen formats. This can be a formidable barrier to remote users who are inexperienced in using electronic catalogs, as would be the case with most off-campus students.

PACLink was first established between IU and Indiana State. It was not an easy installation. Supposedly, each was using the same version of NOTIS but the link would not work. Finally, however, it was discovered that there were minor but crucial differences between the two "identical" versions. Once these were identified and corrected, the linkage worked and the two institutions established access in the spring of 1993.

The third critical component of this system is PACLoan. When the bugs are worked out, a patron will be able to place interlibrary loan requests directly from the computer terminal. After identifying the desired item, the patron will enter the command which initiates the interlibrary loan request process. A worksheet will be displayed into which the patron will enter his university ID and the name of the library at which he wants to pick up the material. The computer will automatically capture the necessary information regarding the selected item.

The request will be forwarded to the patron's home library interlibrary loan staff for review and approval. If the item is owned by several libraries, the computer will first determine which libraries have the item on the shelf and, of those libraries, select the one which has the fewest interlibrary loan requests pending at the moment. The request will be sent to the least busy library unless the staff overrides this choice. The lending library will send the item to the borrowing library just as is the case now and the patron will come in to check it out. As a security measure, the libraries have chosen not to send the items directly to the patron's home.

At the moment, only patrons who are affiliated with an academic institution which is a member of SULAN will be able to participate in this automated interlibrary loan system. Patrons of public and special libraries and other institutions will follow their home libraries interlibrary loan procedures. Interlibrary loan requests will continue to be handled through the OCLC interlibrary loan subsystem until these smaller libraries are ready to hand the PACLink and PACLoan applications.

An additional critical component of this project is now being tested at IU. By loading the multiple database access system (MDAS) on NOTIS host site computers, other information sources besides electronic catalogs will be accessible by users. As a test of this system, IAC's *Expanded Academic Index*, *Business Index*, and *National Newspaper Index* have been loaded on IU's computer and are now searchable using the same NOTIS software that is used to search the catalog holdings. Patrons can search by author, title or keyword but not subject headings. The NOTIS software does not work with the IAC subject headings. Once a patron identifies a particular record, the computer displays the holdings of the libraries in the IU system which hold that particular journal. Several additional indexes will be added in the near future.

Using the NOTIS platform, however, is not the only way Indiana's citizens can access information easily. Anyone with access to an IU computer or to a computer and modem can log into IU's mainframes via the Internet or telephone port and access many resources without the NOTIS intervention. At the Indianapolis campus, for example, users dial the INDYVAX computer, type in LIBRARY at the user id prompt and are automatically routed to ILIRN, IUPUI's library information system. The users can choose to search CARL and other information sources. They can also choose to do direct searches of the electronic catalogs of IU, Purdue, Notre Dame, and the Indianapolis Public Library. Once in Purdue's library system the patron can search not only its catalogs but also its locally mounted files including Wilson indexes. To do the latter, however, the patron must have a valid Purdue id.

Indiana is also engaged in another major project to develop a statewide data network which will permit public libraries, schools, hospitals, and a variety of worksites to access any of these electronic systems. This means that students taking a class at a remote site should have easy access to a computer which is hooked to the Internet. Point of use assistance will be available, in the form of instruction sheets, telephone help lines, interactive help on-line, and local librarians with some training in the commands and resources.

The challenge to librarians who support distance education programs will be to inform students and local librarians of the existence of these databases and to teach them how - and when - to use them. Keeping students and faculty on campus appraised of the resources available and teaching them how to use them is very difficult. To do the same for off-campus students is a monumental project but the payoff will be even greater. Whether our role is one of information provider or information facilitator, our gaol is clear: to enable students to get the information they need as part of an education which is equal to or even better than that afforded to students on the main campus. If we do our part, the availability of these resources will greatly the quality of education for off-campus students.

Indiana's twenty year old vision is becoming a reality. It has linked its citizens to one of its most valuable resources: the libraries of its universities, colleges and many of its public and special library collections. Now it is up to us.

Cooperative Planning for Service and Instruction

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The School of Library and Information Studies and the Library and Information Research Center at the University of Oklahoma in Norman, Oklahoma are developing a project for distance students that provides off-campus library services and a distance course titled "Information Skills for Academic Research." By October 1993, both components will be in the evaluation stage of development.

Upon review of the literature, the developers discovered that such cooperative planning for service and instruction is an unusual phenomenon. This paper will describe the cooperative design process, departments and organizations involved, and materials development. A nine-step instructional development system was adapted to accommodate development of both components. The functions are as follows:

- ○ DEFINE
  - Identify problem
  - Analyze setting
  - Organize management
- ○ DEVELOP
  - Objectives
  - Specify methods
  - Construct prototypes
- ○ EVALUATE
  - Test prototypes
  - Analyze results
  - Implement/recycle

STAGE ONE: DEFINE

PROBLEM IDENTIFICATION

Needs assessment. The School of Library and Information Studies (SLIS) at the University of Oklahoma was approached to develop courses and services by three programs in the University's College of Continuing Education. The Independent Study department, the Bachelor of Liberal Studies program, and the National University Degree Consortium (NUDC) representative were interested in the SLIS developing a course similar to LIS 1013, "Library and Information Resources," for their distance students, and offering library and information services to their students.
The Independent Study department and Liberal Studies programs were responding to anecdotal and

verbal evidence from students and instructors expressing the need for library services. In addition, a study conducted by Connie Dillon (1992) found that access (or lack of access) to adequate library resources was a major concern of distance education students in Oklahoma. The NUDC representative, Linda Norton, serves on the library services committee of NUDC. Her concern was with accreditation guidelines stating that distance students must have access to library resources for successful completion of degree work. Another factor in deciding to design a new course was the recognition that LIS 1013, the existing basic library skills class, needed to be revised to adequately meet the needs of students. The entire course needed reevaluation and updating to reflect new information technologies and process-oriented research methods. In addition, funding for adjunct instruction is scarce, which has resulted in only one section of LIS 1013 being offered each semester.

Although education statistics indicate adults are returning to college in record numbers, the library is one place where they remain apprehensive (Tomaiualo 1990). This apprehension can be exacerbated when the students are distant learners -- ones who do not attend class on-campus, or even necessarily reside near an academic resource center. Power and Keenan (1991) examined the role of the public library in extended campus services. They noted that 40% -70% of off-campus students depended on local public libraries for their academic needs. Further, they note the frustration expressed by both the students and the public librarians when those needs cannot be met.

Technology has made distance learning more accessible, and may also be a means of meeting the information needs of distance learners. Kopp (1991) identified three critical areas in his article on technology and off-campus library programs -- access to information, delivery of information, and communication. Dede (1991) examined the impact of emerging technologies on distance learning and argues for formulation of guidelines for use of such technology to prevent the technology from adversely influencing the educational message. The role of technology in distance learning is a part of most contemporary discussions of distance education (e.g., Fisher 1988; Lessin 1991; Willemse 1991).

These requests and evidence in the literature have resulted in cooperative planning with the Library and Information Research Center (a joint project with University Libraries) and SLIS faculty to provide off-campus library services and a distance learning package titled "Information Skills for Academic Research."

Establishment of priorities Participants committed financial and other resources for the project. The SLIS contributed one faculty member's time, office space, and supplies. The College of Continuing Education has contributed services and supplies. Liberal Studies is funding one 0.5 FTE graduate assistant position. Independent Study is providing funds for instructional design support and video production. All involved in the project have demonstrated enthusiasm for the project and its purposes. Administrators, instructors, library practitioners, and current and past students have contributed to the process.

Statement of problem College and university level students lack the necessary information skills and knowledge to conduct successful academic research in library and information centers. Developers decided to offer courses both at lower-division and upper-division levels. The primary differences between the courses are sources needed to complete assignments and difficulty of coursework.

ANALYSIS OF SETTING: AUDIENCE

Learners will be undergraduate college students enrolled in one of two course numbers: a lower-division library skills class, "Use of Library/Information Resources" or an upper-division class, "Information Skills for Academic Research." Freshmen through seniors, often non-traditional students, have enrolled in the on campus version of the lower-division course.

Data on distance learners were gathered from a variety of sources for this analysis of potential students and service users. Both of the designers have taught LIS 1013 for honors students as well as general sections of the course, and based some of the analysis on prior experiences. Two other instructors were interviewed for their perceptions. Information was also taken from a review of the literature conducted earlier this academic year. The following are excerpts from a more extensive audience/learner analysis conducted by the developers.

Some data for the audience analysis were gathered from adult students enrolled in the Bachelors of Liberal Studies (BLS) and Masters of Liberal Studies (MLS) programs at the University of Oklahoma. Providing information service to these students was a major part of the original cooperative agreement between the School of Library and Information Studies and the College of Continuing Education. These students served as one source regarding the information needs of nontraditional students who were in a program that did not require regular campus classroom attendance. Many of the students lived out of the state, with a few residing out of the country.

A presentation was made to six entering groups and a student-formed support group regarding the services available to them through the cooperative pilot project. The students were asked to complete a one-page questionnaire as a means of determining recent library experience as well as availability and usage of technological resources.

Briefly, the 100-plus responses indicated that over half had access to a facsimile machine and used a personal computer. Conversely, less than half used a modem or had ever accessed an online (computer) library catalog. Recent library usage by the group was evenly divided between public and academic libraries, and not surprisingly, the most common reason for usage by these students was for academic purposes. (Most of them had just completed a required paper as part of the opening seminar's assignments.) Over 80% of the respondents indicated they had adequate library resources in the area where they lived.

These results lend credence to the characteristics listed in the following section -- some computer literacy can be assumed and adult learners are likely to be familiar with their public library. Their overwhelming agreement to participate in the Information Services Pilot Project underscores their positive attitude toward learning, and may also indicate an anxiety about using modern libraries.

Cognitive Characteristics of Distance Learners:

- General aptitudes: Learners will generally have average or above average intelligence.
- Specific aptitudes: Some learners will have moderate to high levels of computer literacy, but only limited levels can be assumed.

- ○ Developmental level: As adults and young adults, most learners will be in Piaget's formal operations stage; and Erickson's Identity vs. Identity Confusion, Intimacy vs. Isolation, or Generativity vs. Stagnation stages. As university students, learners will have generally reached Maslow's hierarchical levels for physiological, and safety needs. It is expected most (not all) learners will have met social needs and many will be working toward achieving esteem, while few learners will have reached self-actualization.
- ○ Reading level: Learners are assumed to read at a high-school reading level. Learners will have also been admitted by the University, which requires a certain level of achievement reflected on standardized aptitude tests (ACT or SAT).
- ○ Cognitive processing styles: A variety of processing styles will probably be present. Conceptual tempo will vary from reflectivity to impulsivity, although learners at the college level tend to be more reflective. Learners might benefit from structure such as job aids, and graphic representations of screens and pages from sources.
- ○ Cognitive and learning strategies: General students will vary in the ability to use cognitive strategies. Organization and elaboration strategies will be particularly useful for lessons goal, because ties to previously learned information will be needed. Comprehension monitoring strategies are also needed to a degree; the instructional materials can elicit these strategies through questions and using embedded test items to help identify needs for remediation.
- ○ Specific prior knowledge: Previous experience with libraries limited to familiarity with basic purpose of card catalog, ability to use some general reference sources (dictionaries and encyclopedias) and indexes of books, although there will be variability in the group. Previous experience with telecommunications will be varied.

Affective Characteristics of Distance Learners:

- ○ Interests: Learners will have a variety of personal and academic interests upon entering the course. Those who are not "academic types" will need to be drawn in by practical, life-oriented examples or more exotic, fun topics to explore. Interests will be solicited at the beginning of the course on student information forms, and will assist the instructor to determine appropriate examples and assignments. Instructional strategies must address students' ability to attend and focus on lessons.
- ○ Motivation to learn: Because the course is an elective and students are assumed to have personal or academic information needs, motivation level is expected to be fairly high. This can be emphasized through attention to ARCS in lesson design. Relevance particularly applies in motivating learners for this course which has application across all life situations.
- ○ Attitude toward learning: Most learners will have a generally positive attitude toward learning, particularly the non-traditional, older students. Attitudes will be generally positive, although some students may have negative past experiences with bibliographic instruction.
- ○ Perceptions of and experiences with specific forms of mediation: Many students will have had previous experience with print and instructor mediation; many will have had experience with personal computers as a tool at work or school. Confidence strategies in instruction will address some learner concerns.
- ○ Academic self-concept: Academic self-concept will be generally high. Distance students' previous academic performance is above average to high. Other students will have a full range of attitudes about their ability to learn.

○ Anxiety level: Trait anxiety may be present in some learners. State anxiety will often depend on previous library research or telecommunication/computers experiences, which often have been sources of frustration for students.

Social Characteristics of Distance Learners:

○ Relationships to peers: Because no face-to-face interaction will occur among students, students' relationships to peers may be even more important. Interaction can be facilitated by establishing a special interest group on the SLIS bulletin board system, an electronic multi-line BBS accessible through the Internet and modem dial-up.

○ Feelings toward authority: Most students have generally positive feelings toward authority, having had previous experiences in educational and/or work settings.

○ Socioeconomic background: Backgrounds will vary greatly, from low-income scholarship students to learners from affluent backgrounds.

○ Racial/ethnic background, affiliations: will reflect general college population, which is predominately white, with members of a variety of ethnic, racial, and international groups, including Asian-Americans, African-Americans, Hispanic Americans, Native Americans, and foreign nationals.

○ Role models: Learners may relate to a number of role models during the course, particularly individuals observed in information-seeking roles. Possible role models include the instructor, professors in their field of study, librarians (from past or present institutions), and professionals practicing in the student's chosen field.

Implications for Design. The characteristics of distance learners have implications for design of the course and service.

Cognitive Characteristics. Learners are generally mature and capable of complex reasoning and problem-solving, and will benefit from learning which directly affects their personal and professional needs. Materials should be written at a high-school reading level, and the instructor should be aware of potential difficulty for some students in understanding spoken English. Graphics and verbal information should supplement and enhance each other. Information can be presented in a number of ways to facilitate learning by persons with different cognitive styles. A variety of examples from life experiences and assignments that use life experiences should be used, since learners will have varied personal, academic, and professional experiences. Previous knowledge of procedures can be assumed to be limited; review of basic concepts is necessary, particularly since some students will not have retained information from previous instruction. Cognitive learning strategy repertoires will vary among students; materials may suggest appropriate strategies for different tasks. Structure in presentation will assist some learners achieve success.

Affective Characteristics. Learners will have a variety of personal and academic interests, and will have varying motivations for taking the class; although the class is an elective, the course designers should emphasize the practical applications of each skill learners are asked to perform. Anxiety should be addressed by frequent embedded test items or other devices for students to assess their own performance. Keller's ARCS model should be considered and elements of the conditions integrated into instruction.

Social Characteristics. Instruction should emphasize a cooperative environment, with learners contributing to the group's achievement. Competition should be de-emphasized. Ethical considerations of the procedure may need to be addressed, perhaps if the instructor has concerns about individual students. Examples from a variety of socioeconomic and ethnic viewpoints and a variety of role models may be integrated into lesson materials.

ANALYSIS OF SETTING: CONTEXT

Data were gathered from a variety of sources for this analysis. Both of the designers have taught LIS 1013 for honors students as well as general sections of the course, and based some of the analysis on prior experiences. Two other instructors were interviewed for their perceptions. Information was also taken from a review of the literature conducted earlier this academic year.

Teachers/Trainers. Faculty who will teach the course will all have an M.L.I.S. from an ALA-accredited graduate program, or be working on the M.L.I.S currently, and possess another advanced degree; most will have work experience in public or academic libraries. Instructors in the SLIS generally have diverse backgrounds, giving them a more rounded perspective on information research, and research skills that have been exercised on a wide variety of topics all disciplines. Instructors are usually most comfortable with print media instruction, one-on-one and small group instruction, and interpersonal interaction on e-mail or telephone. Previous instructional experience will vary from instructor to instructor; new instructors in the SLIS are advised to utilize the services of the Instructional Development Center in preparing for instruction and evaluating instruction.

Service Providers. Service providers will be graduate students in the M.L.I.S. program. Providers will have successfully completed LIS 5013, Information Resources and Services, a course which covers basic reference services. Providers will have an understanding of adult and distance learners, superior communication and question negotiation skills, training in information technologies and telecommunications, and the ability to navigate and function within library, educational, and administrative networks.

Existing Curricula. The existing course is an undergraduate elective course, open to freshmen through graduate students; it is not a part of a particular scope or sequence. Students from all fields and majors take the course and advisors from a variety of departments encourage their students to enroll. Additional information on the general scope and sequence of undergraduate education may be obtained from the general education requirements as outlined by the participating universities.

Hardware. The course will be delivered via mail, videotape and/or television. The libraries used will vary greatly in the technologies available for student use in completing assignments.

SLIS has a multi-line electronic bulletin board system accessible through the Internet as well as dial-up access. Students will be encouraged to use this service to contact instructors and information services staff. Telephone, facsimile, and mail service will also be available. SLIS information technologies faculty expect that by Fall 1994, the BBS will offer both e-mail and Telnet access to users, providing real time access to the Internet.

Classes/Facilities. Most students enrolled in the course will receive instruction in their own homes. Assignments will be completed at home or in area libraries. The library facilities available for students will vary greatly depending on the student's location. Office space and lab facilities will be available for use by the course instructor and service providers.

During the pilot year of the service, service providers primarily used the University Libraries and the Oklahoma Department of Libraries in acquiring materials for users. Providers also accessed the catalogs of distant libraries through Internet, creating bibliographies for users of materials at their local libraries. Materials were also identified using OCLC and RLIN, and were requested for the user through inter-library loan. Designers are investigating the potential use of CARL UnCover to acquire periodical articles for users.

School/Organization. The course is offered as a service course by the SLIS, which offers two ALA-accredited master's programs and one advanced certificate program. The SLIS offers only two service courses on a regular basis, LIS 1013 and LIS 4303: Children's Literature. Undergraduate courses are not a priority for the SLIS, although an attempt is made to offer LIS 1013 each semester. Current funding formulas make it difficult if not impossible for the SLIS to fund multiple sections of LIS 1013. A children's literature course is currently offered through Independent Study.

The general environment is a university that has 115 undergraduate majors, and 111 master's and 78 doctoral programs. The course is a service course offered by the SLIS as an undergraduate elective. Decision making with regard to course offerings and course content, and to a certain extent, funding and staffing, is within the SLIS. However, funding decisions necessary to implement these decisions are often made that the college level.

Community Characteristics. The university that offers this course is in a sizable town, Norman, near a large city, Oklahoma City. Local libraries will offer students the opportunity to practice the skills learned in this course. It is unlikely that community mores or taboos would affect decisions regarding course content or delivery. Telecommunications and information technology firms are active in public relations and promotion of new technologies, so most communities have a generally positive attitude toward using telecommunications and information technologies.

The library and information community is actively involved in making information resources more widely available. In Oklahoma, state agencies have worked to provide public libraries with facsimile machines, personal computers and modems. Interconnectivity is increasing, empowering library users in rural communities to locate and use resources at distant sites independently.

ORGANIZE MANAGEMENT

Tasks and Responsibilities. A list of tasks to be accomplished and individuals responsible has been drafted (adapted from Brown 1978). Major tasks and responsibilities include:

General Tasks (Harrington and SLIS faculty/staff)

Identify and schedule required resources

Prepare work descriptions for staff
Establish general plan of operation
Prepare budget
Design print materials
Oversee design of A/V materials
Try out prototypes
Revise prototypes

Specific tasks:

Print Development (Harrington with Rezabek)

Develop product specifications
Develop product treatment
Develop outline
Review critiques of outline by content specialists
Review data from learner-based evaluation of outline
Revise outline
Prepare draft of manuscript
Review critiques of draft by content specialists
Review data from learner tryout of draft
Prepare formative evaluation plan
Revise draft
Approve final proofed and edited manuscript
Develop graphic design plan
Develop specifications for illustrations and captions
Approve illustrations and captions
Approve layout, paste-up
Prepare and implement evaluation plan
Review evaluation data
Revise paste-up
Give final approval
Oversee production of manuals

Video development (TV/Satellite Service with Rezabek and Harrington)

Establish schedule
Establish budget
Identify and assign required staff
Obtain and verify clearances and releases on music, visuals, talent, etc.
Review product specifications with writer and producer/director
Conduct formative evaluation
Review formative evaluation data
Revise treatment/storyboard
Develop first draft scripts Review content specialist and learner evaluations of first draft scripts

Revise scripts
Review scripts with producer
Prepare shooting scripts
Approve production plans
Approve workprints
Approve complete production for field testing
Review evaluation data from field testing
Revise video
Approve final, tested version.

Service Development (Spindle with SLIS faculty/staff)

Develop specifications
Gather descriptive data on learners
Determine information needs
Investigate service limitations
Develop service guidelines
Develop cost and pricing structure
Develop administrative procedures
Plan library orientation
Prepare information packet for remote access to library OPAC and local BBS, communication channels for service
Establish and maintain contact with students through phone, letters, BBS
Provide information services
Connect users with local information sources
Follow-up on information provided
Conduct formative evaluation
Analyze results of evaluation
Revise service procedures and implement

STAGE TWO: DEVELOP

OBJECTIVES

Instructional goals were developed by Jane Harrington, the faculty member responsible for development of the course, and Robert Swisher, Director of the School of Library and Information Studies (SLIS) at the University of Oklahoma.

Upon completion of the course, the student will be able to:

- ○ Describe how information is defined by experts, and recognize how that knowledge can help determine the direction of his/her search for specific information.
- ○ Evaluate the organizational content, bibliographic structure, function, and use of information sources.

- Identify useful information from information sources or information systems.

- Describe the way collections of information are physically organized and accessed.

- Select and use appropriate methods to access information from local and geographically distant information agencies, both public and private.

- Develop research paper topics, organize information, and prepare notes and bibliographies in accordance with departmental/professional standards.

Instructional goals one through four were adapted from the model statement of objectives for academic bibliographic instruction (Bibliographic Instruction Section, Association of College and Research Libraries 1991). Goals five and six were developed by Harrington and Swisher, based upon the previous goals of LIS 1013: Use of Library/Information Resources and discussions regarding the proposed emphasis on resources outside the learner's geographic location.

Service component goals were developed by Debra Spindle and Robert Swisher, Lotsee Patterson, and Mike Havener, all SLIS faculty. The goals were developed in consultation with representatives from the College of Continuing Education, and revised during formative evaluation during the pilot year. The off-campus library services project will be able to:

- Assist distance learners to locate specific materials.

- Assist users identify resources close to the learner's home.

- Develop search strategies with learners.

- Provide inter-library loan assistance and document delivery within copyright limitations.

- Help users define information needs.

- Provide orientation/instruction in information technology and telecommunications.

- Assess learner library and technology use patterns and effectiveness.

SPECIFY METHODS

Instruction. The five major components of instructional strategies are preinstructional activities; information presentation; student participation; testing; and follow-through. Information presentation and student participation are addressed through the instructional media. Major influences on the development of instructional strategies for the course were Smith and Ragan (1992), Gagne (1992), and Svinicki and Schwartz (1988). Content area and organizational influences include Freides (1973), Fink (1989), Eisenberg and Berkowitz (1990), Engeldinger (1991), Gates (1989), and Katz (1984).

Freides work on the hierarchy of scholarly literature provided a structure for the course. Fink's work in general provided inspiration for bringing in topics such as critical thinking, the information society, and the politicization of information. Eisenberg and Berkowitz's information problem-solving mode, the Big Six Skills Approach, was used as a framework for the research process, and the illustrate the role each tool and technique plays in the process. Engeldinger's work on critical thinking and evaluation provided a model for evaluation of information in all formats. Gates and Katz, standard works in Library research methods provided thorough coverage of basic reference tools. Lecture notes of previous LIS 1013 instructors were used extensively.

Preinstructional activities. Because this is an elective course, and distance and independent study students are traditionally more motivated than other groups of undergraduates, it may be assumed that the students' motivation level is fairly high. Students will be informed of the learner objectives in the student manual.

Testing. The pretests will not test for entry behaviors, because the primary requirement is successful completion of the previous unit. If a student is unable to complete sections this unit, he/she will be redirected to previous applicable units. Embedded items will be included throughout the unit after every one or two subskills has been covered. The post-test will be administered at a test-taking site approved by the Independent Study Department and/or the NUDC, sent to the appropriate institution, who will grade the test and return results to both the instructor and student.

Follow-up. Remediation will be offered in the form of alternative assignments covering the same objectives and redirection to previous units. Enrichment activities will be suggested in both the instructor's manual and student manual. These activities may include opportunities to work with more advanced research tools or suggestions for more in-depth research.

Media. Two instructional media will be used. The course will be mediated using the following methods: video presentations and a manual/study guide. These media fulfill the instructional needs of students. Both were recommended by the organizations requesting the course development.

Video presentations. Thirteen thirty-minute videos will provide direct instruction for content of the course.

Manual/study guide. A manual will support and extend content delivered by the videos. Text will explain and summarize content. Examples from standard reference tools are reproduced and explained. Assignments have been developed to be completed at three levels, depending on the student's access to library resources:

- Level one: answers to questions and problem solutions can be obtained using examples and narrative included in the manual itself;

- Level two: answers to questions and problem solutions can be obtained using standard reference works available in most public libraries; and

- Level three: answers to questions and problem solutions can be obtained using standard reference works available in most academic libraries.

CONSTRUCT PROTOTYPES

Prototypes of the instructional and evaluation materials were developed during late fall and spring of 1992/93. Videotapes were shot and produced during spring and early summer 1993, and were not available for the initial tryout of the print materials.

STAGE THREE: EVALUATION

TEST PROTOTYPES

Tryouts of print materials were conducted in spring 1993 during the regularly scheduled honors section of LIS 1013 on campus (10 students were enrolled). The instructor, Debra Spindle, was be present to observe student interaction with the material and to provide instruction that included in the video presentations.

Evaluation data to be collected during each stage of development will include the opinionnaire, a unit-by-unit evaluation, student test and assignment results, and instructor observation. Formative evaluation for the print materials was conducted during the spring 1993 semester.

Formative evaluation will continue during the first year of the course, both as lower-division and upper-division numbers. Each student will complete opinionnaires evaluating each unit's print and video components. Data on test and assignment performance will also be collected and analyzed to assist in revision.

ANALYZE RESULTS

In addition to an opinionnaire, students completed a unit-by-unit evaluation of the manual. Students listed strengths, weaknesses, and errors (typographical and factual). Learners made suggestions concerning rearrangement of unit components and elimination of redundant content, and pointed out confusing or incomplete explanations of concepts. Useful and irrelevant assignments were noted. Embedded test items were praised, as were the self-evaluated pretests. Pretests and post-test scores showed that students learned verbal information, concepts and procedural rules. Assignments focused on procedures and problem-solving skills. Assignments were completed successfully by a majority of the students. Results of the formative evaluation by students will be used cautiously, however. The students enrolled in this section were honors students, typically skilled in overcoming instructional shortcomings.

The instructor of the course was Debra Spindle, co-author of this paper. Spindle provided observations of student reaction to content and further suggestions for revision. Instructional designer Randy Rezabek and content area expert Robert Swisher also suggested some revisions.

Data will also be analyzed to determine reasonableness of entry characteristics and objective components. Variance from instructional methods will be noted in the analysis. Data will be analyzed to determine if each objective was attained. An assessment of the evaluation process will also be conducted.

IMPLEMENT/RECYCLE

Revisions based on formative evaluation were incorporated into the materials for fall 1994. The video production was able to adjust to some of the suggestions that came from other evaluative activity. Major adjustments in objectives were not necessary following initial tryouts. On-going evaluation will take place, with material revision at the end of each academic year. Decisions will be based upon data analysis.

THE COOPERATIVE PLANNING PROCESS

The developers of these intimately related projects believe the cooperative design process will benefit both programs in the following ways:

- the need and the means for receiving professional assistance will be communicated to course students;
- course students will be better consumers of information services offered, will be easier to work with, and will have realistic but more extensive expectations than most library users; and
- the course will create a market for information services offered.

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When the Gun Is to Your Head: Responding to an Accreditation Association's Concerns About Your External Degree Program.

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Concordia Theological Seminary

THE PROBLEM

On March 6, 1991, Concordia Theological Seminary received a jolt that would send it scrambling in order to maintain its reputation. The North Central Association (NCA) part of the joint North Central-Association of Theological Schools (ATS) visitation team was going to recommend that a focussed visit be made to the campus by the end of 1992 in order for our seminary to show cause as to why its D.Min. program, and especially its extension sites where Doctor of Ministry (D.Min.) clusters were meeting, should not be disaccredited.

The reasons for this action were many. Our seminary had not complied with state or provincial law in the establishment of its extension sites. We were operating illegally in some cases. Also, regular supervision of D.Min. students and D.Min. projects had not occurred, so that technically we had a large number of students in the program who were receiving no guidance. These students, some of whom had started the program fifteen years previously, were still on the books. They needed to be either guided toward the completion of their program or released from it. Also, some of the courses offered by extension and available for graduate credit, were taught in such places as Lake Okoboji, Iowa or Jackson Hole, Wyoming. These courses, one would assume, would require a research component off-campus. Yet no provision for providing research material had been made and no plan had been made to assist students in locating research materials.

HISTORY OF THE PROBLEM

It is no wonder that our institution was cited as deficient in providing proper guidance and resources for our students in the D.Min. program offered at extension sites. Many institutions had discovered the benefits of offering such external degree programs. Unfortunately, two problems often emerged. A program taught away from campus often did not have the support services that students taking the same program on campus received. It was often felt that the quality of the educational experience of off-campus courses was deficient to that of courses taught on-campus (Kascus and Aquilar 1988, 29-30). Hence, the same course, that ideally should have the same requirements whether it was taught on-campus or off-campus, could actually be two different courses with two different levels of requirements.

The potential lack of integrity between an institution's on campus and off-campus courses did not escape the notice of the education community. In the 1980's, the accreditation associations began writing into their standards for accreditation rules that would require member institutions to see that courses taught off-campus received the same support as courses taught on-campus (Kascus and Aquilar 1988, 31).

The NCA and ATS also wrote these stipulations into their standards (Kascus and Aquilar 1992). As a result, Concordia Theological Seminary was found to be in violation of North Central and ATS standards regarding off-campus programs.

OUR RESPONSE

While many individuals on our campus were involved in resolving the many problems that the North Central and ATS visitors had found in our D.Min. program and our extension sites for these programs, I will limit my paper to a consideration of the library's response to this challenge.

STUDY

My first response was to find out as much as I could about the provision of library resources to extension sites. Especially pertinent were the *ACRL Guidelines for Extended Campus Library Services* of 1990 (Association of College and Research Libraries 1990). Also, I was able to spot a recently compiled comprehensive bibliography of books, essays, and research on off-campus library services entitled *Library Services for Off-Campus and Distance Education: An Annotated Bibliography* (Latham, Slade and Budnick 1991).

These led me to the published proceedings of the biennial Off-campus Library Services Conference. These proceedings constitute the major help for anyone wanting to become familiar with the provision of off-campus library services (Jacob 1991). A compilation of some of the best of the papers from the conference has been published, and is entitled: *Off-campus Library Services: Selected Readings from Central Michigan University's Off-campus Library Conferences* (Lessin 1991).

To receive answers from experts on the provision of off-campus library services, I contacted librarians from Central Michigan University in Mt. Pleasant, Michigan. Central Michigan has been a leader in responding to the needs of its students and faculty at its extensions. They play a major role in the organization of the biennial Off-Campus Library Services Conference and publish its proceedings. When I had questions that they could not answer, they referred me to others whom they thought could assist me.

As a result of my study of the field of off-campus library services, it became apparent that someone from our library should visit our D.Min. extension sites in St. Catharines, ON, Edmonton, AB, and Irvine, CA. That librarian was me.

INTERVIEWING

So, on Jan. 29 I went to Concordia Lutheran Theological Seminary in St. Catherines, ON, which is located on the campus of Brock University, a provincial educational institution. I visited with their part-time library technician, the professor who serves as librarian, the business manager who oversees audiovisual services, the academic dean, and the president of the seminary, as well as the public services librarian in the Brock University Library. I evaluated both the seminary's library and the most pertinent sections of the Brock University Library. I also visited with a class of our D.Min. students regarding how they went about getting the library resources they needed for class.

In my discussions with the library technician and the person providing audiovisual services, I asked such questions as:

- Do you provide audiovisual materials and equipment for our D.Min. Classes?
- What kinds of audiovisual formats and equipment are available?
- Is your institution accredited?
- Do you provide circulation privileges to our D.Min. students?
- What circulation policies affect our D.Min. students?
- Do you provide interlibrary loan services to our extension students?
- How are interlibrary loan services provided and how long does it take to usually receive the requested materials?
- Do you provide database searches for students and at what cost?
- Do you reserve materials for our classes if requested?
- Do you provide bibliographic instruction to our students individually or in groups?
- If we sent a shipment of library materials for use by an extension course, would you circulate the materials to our students on our behalf?
- Are your hours of service sufficient to meet the needs of our students and faculty during the duration of our course?
- Would you be willing to open beyond your normal hours of service if requested by a professor of our extension course?
- What computer-based resources are available at your library?
- How many books and journals in the various theological disciplines are in your library?
- How much money do you expend yearly on the various kinds of library materials?
- How many volumes do you add to your library yearly?
- What are the qualifications of the various members of your library staff?
- May I have a copy of your ATS annual survey and of your periodical list?
- What other libraries in the area are of value to D.Min. students?

Among the questions that I asked of the professors of the seminary who were serving as president, academic dean, and librarian (who also had taught some of our extension courses as adjunct faculty) were:

- What do you consider the strengths and weaknesses of your library?
- How well can your seminary support the program of the library in its efforts to meet its students' research needs?

- What do you see the emphases of the seminary being in the future and how will these impact the library?
- What kind of research requirements do the students in the D.Min. courses you teach have to complete?
- How good are the holdings in your area of specialty and in practical theology?
- Would the institution be willing to enter into an agreement with our seminary regarding the provision of library resources to the D.Min. students and faculty at your extension?

I also interviewed the public services librarian at Brock University. While asking her many of the same kinds of questions that I asked of the providers of library resources at the seminary, I also asked questions like the following:

- Do you allow users not affiliated with your institution to use the library and at what cost?
- Are these users allowed access to the collection, circulation privileges, reference assistance, the use of computer-driven resources, and the use of audiovisual equipment?
- Besides the area of theology, how good is your collection in such cognate areas as history, philosophy, classical and Semitic languages, psychology, education, music, and area studies.
- May I obtain a catalog of your institution, and one especially listing your graduate programs?
- Would your institution be open to entering into an agreement with my seminary regarding the provision of library resources to the D.Min. students and faculty at our St. Catharine's extension?

Finally, I met with the D.Min. class. Besides explaining what I was doing there and inviting them to contact our library regarding any needs they had related to their program with which we would be able to render assistance, I asked them such questions as these:

- Is the St. Catharines collection adequate to meet your research needs for the D.Min. program?
- Where else do you go to meet your research needs?
- Do the D.Min. courses require you to use library resources to complete them?
- Do you think the courses should require more research using library resources than they are presently?
- Do you feel competent at doing library research?
- Should library orientation and/or bibliographic instruction be included in the program?
- Do you order library resources using interlibrary loan services?
- Whom do you use to acquire interlibrary loan materials?
- Are your requests for reference assistance handled adequately?
- How has our library in Ft. Wayne performed in meeting your requests for information and/or reference assistance?
- Do you know how to search automated databases?
- Have you had searches of on-line automated databases performed for you?
- How have your classes' needs for reserve materials been handled?
- Are there any charges for library resources and, if so, are such charges fair?
- Are the needs for audiovisual materials and equipment provided for adequately?
- When evaluations of courses take place, are there questions pertaining to the adequacy of the library resources in meeting the educational and research components of the courses?

EXAMINATION

However, my study of the adequacy of the library resources available to the D.Min. students at the extension did not stop with the interviews of library resources providers and the extension's students and professors. I also looked at the collection itself.

Besides the obvious examination of the catalogs, the periodical indexes, and the reference collection to insure that the important theological resource materials were available, I also analyzed the collections.

In the case of the Concordia Lutheran Theological Seminary Library collection, I analyzed its collection in two different ways. First, I conducted two sample searches. The subjects that I chose to search were the "Lord's Prayer" and "Law and Gospel." These topics were chosen because they not only can be expected to have practical application, which is the focus of the D.Min. program, but also to have been the subject of scholarly theological discussion in the areas of exegesis, systematics, and perhaps even history. Since the D.Min. program is to apply theological truth to practical issues, the Lord's Prayer and Law and Gospel seemed to be ideal subjects, at least from the Lutheran perspective.

Secondly, I counted shelves of books. Especially I considered the number of shelves of books in the BV section, since the D.Min's emphasis is practical theology. I determined the number of shelves devoted to the church, theological education, pastoral theology, liturgics, homiletics, Christian education, missiology, evangelism, pastoral care and counseling, youth ministry, parish administration, stewardship, spiritual life, and devotional literature. Since the collection was so small, I also analyzed the remaining sections of the library as well in order to determine their adequacy

I also considered the holdings of the Brock University library, looking over their indexes, catalogs, reference and periodical collections. But I especially analyzed their book collection. Again searches were done on the Lords' Prayer and Law and Gospel. Again, I analyzed their BR to BX sections. I also devoted time to analyzing their B to BP sections, as my seminary is considering offering S.T.M. level courses at St. Catharines in the future, and many of the important theologians' works are located in the philosophy section. It also helps to see how other major religions, and most especially Judaism, fares in the collection.

My work was not over when I returned home, for in order to have something to compare the resources at St. Catherines against, I had to analyze my own collection. Hence, I conducted the Lord's Prayer and Law and Gospel searches in my own library and counted the number of shelves of materials on the various areas of practical theology in the BV collection.

A special word should be devoted to the subject searches that were performed. Each of the works located was evaluated in terms of whether the work was oriented toward lay or scholarly use. Especially with the topic of the Lord's Prayer, there is much material of a devotional nature that may not be of use for D.Min. level work. Also, I considered the denominational orientation of the authors. Since our D.Min. program is provided by a Lutheran seminary, important works by

Lutherans, and especially Lutherans of The Lutheran Church-Missouri Synod, should be available. However, because of the dialogical nature of theological discussions, I also expected there to be works representative of other faith traditions as well. Hence, the analysis of the book material into lay and scholarly works, and by denominational representation, were important factors in my analysis.

It should be noted that not only did I visit St. Catharines, but I also visited our extension sites at Edmonton, Alberta, and Irvine, California as well.

In Edmonton, besides visiting with the library technician and the professors serving as librarian, academic dean, and president at Concordia Lutheran Seminary, I visited with the head librarian at Concordia College, which is adjacent to the seminary, and with the religious studies librarian at the University of Alberta. As I talked with these individuals, I also queried them about other libraries in the area, such as St. Stephen's College, Newman Theological College, St. Joseph's College, Edmonton Baptist Seminary, King's College, and the University of Calgary. I determined their strengths, weaknesses, size, quality, and use policies from these second-hand sources.

At Irvine, I visited with just the head librarian at Christ College Irvine, a school owned by The Lutheran Church-Missouri Synod. Since this librarian had formerly been a theological librarian at our seminary when it was at Springfield, IL, he could talk knowledgeably about his collection and the collections at the University of California Irvine, Fuller Theological Seminary, Talbot School of Theology, the Graduate School of Theology at Azusa Pacific University, Claremont School of Theology, some of the other University of California campuses, the local junior college system, and the Orange and Los Angeles public library systems. In some of the cases, I phoned the libraries to discuss their institutions' strengths, weaknesses, and use policies to verify the information given me.

It should be noted that at both the University of Alberta and at the University of California-Irvine, I also performed sample searches and did shelf counts of their B ranges. I also considered their catalogs and indexes, but, as might be expected, this required no more than a cursory glance.

REPORTING THE RESULTS

Description After coming back from my visits to the seminary's extensions, I set out to write the reports to describe the library resources available, to analyze the ability of these resources to meet the library-related needs of our D.Min. students, and to develop a plan to arrange for the provision of needed library resources.

I began the reports with a description of the library of the host institution. In all three cases, these institutions were owned by either The Lutheran Church-Missouri Synod or its sister denomination, The Lutheran Church-Canada. As such, they all had in their collections the standard theological titles representative of the confessional Lutheran tradition. Unfortunately, none of these institutions were fully accredited by the ATS. Both Canadian seminaries carried an associate status in the ATS, while Christ College Irvine is only a regionally accredited four-year liberal arts college. Both of the seminaries' library collections were small. One had 26,000 volumes and the other 15,000 volumes. In fact, Christ College Irvine, because of its being an older and larger institution than the seminaries, plus the fact that its librarian is a former theological librarian, had a better theological collection and cognate resources than either Canadian seminary.

I also described the audiovisual resources and equipment available, the staffing, seating, service hours, and acquisitions situation at the schools. Again, in most categories, Christ College Irvine was strongest.

I then described the most important close-by library resources. In St. Catharines' case, it was Brock University. In Edmonton's case, it was the University of Alberta and Concordia College. In Irvine's case, it was the University of California-Irvine.

Since the universities were large institutions with from one to four million volumes, there were a wealth of materials available. In my description of their collections, I concentrated on describing the BV section and then also described the other theological groupings more generally. I listed the institutions' baccalaureate, master, and doctoral level programs, assuming that in such well-respected, accredited institutions, collection development would probably follow the institution's academic program's interests. By doing this, I was able to determine the likely areas of strength in those fields cognate to theology. I also listed the various research institutes at the university that likely would indicate areas of strength in research materials that would be supportive of our graduate programs. For example, the University of Alberta had institutes in Ukrainian studies, theoretical psychology, criminological research, experimental sociology, gerontology, clinical education, developmental disabilities, population research, comparative literature, and economic research. All of these institutes would contain potential resources of assistance to either our D.Min. or Doctor of Missiology students.

Finally, in the cases of Edmonton and Irvine, I commented upon the other nearby libraries that could be expected to have a significant collection of theological resources. Since these collections were not visited, I had to rely on the assessments of the librarians and professors with whom I visited and upon telephone calls to some of the librarians of those collections.

ASSESSMENT

After the descriptions of the library resources available, I assessed the ability of these resources to support our curriculum and our graduate programs.

I began by analyzing the library resources in terms of how they could support our departmental curriculum. Our seminary has five departments: exegetical, systematical, historical, practical, and missiological. Hence, I devoted a section to each of these departments, explaining the strengths and weaknesses of the resources available. I also made suggestions as to the kinds of courses that could best be supported by the available resources.

I next considered whether the resources were available locally to support coursework in our three graduate degree programs. These degrees are the Masters of Sacred Theology (S.T.M.), the Doctor of Ministry (D.Min.), and the Doctor of Missiology (D.Miss.). In the S.T.M. section, I would list the S.T.M. courses for which there were sufficient library resources available, and suggest the titles of courses for which there were sufficient resources. For the D.Min., I would list the various areas of practical theology, (namely, pastoral theology, liturgics, homiletics, Christian education, pastoral care and counseling, youth ministry, parish administration, stewardship, spiritual and devotional life, and miscellaneous other areas), and then I would comment upon whether there were sufficient resources available for coursework. Sometimes I would describe how, if a course were taught in a particular way, there might be sufficient resources. I also would indicate when there were a sufficient quantity of library resources on a secular side of a subject, such as education, but insufficient library resources of a specifically Christian nature on the subject. For the D.Miss., I considered the available resources according to the five emphases that we have in the degree. These are: church planting, theological education, leadership preparation, Bible translation, and urban missions. I would indicate where these collections were strong in ethnic or area studies, and where the collections were strong on the secular aspects of these emphases, as the theological resources to support these emphases were usually lacking.

PLAN

Finally, I developed a strategy to insure the delivery of adequate library resources to our D.Min. students. This strategy had to insure that:

- There was a core collection of materials and equipment available for whatever courses were to be offered.
- Qualified reference assistance and reference sources were available to meet the individual needs of our students and faculty at the extensions.
- Inter-library loan service was available for the students and faculty to acquire the resources not locally available.
- Bibliographic instruction, library orientation, and other helps for the students and faculty were supplied so that they could become aware of how to go about research and so they could become familiar with the available resources.
- Responsible library staff were in place to assist the students and faculty of the extensions and to develop plans for the improvement of services to these patrons.

Specifically, I proposed the following course of action:

- Written understandings were to be arranged with the appropriate institutions to insure access to their resources and services.
- Our library's circulation and inter-library loan staff were to work with the library of the extension site to arrange for the provision of adequate resources and assistance.
- We would either provide the extension site with the core collection of materials for the D.Min. program, or ship the materials needed at the extension for the particular extension course that was to meet there.
- We would arrange for reference assistance to be provided at the extension site by the staff at the site institution's library and by our own reference staff. Furthermore, our reference staff would provide database searching when needed.
- We would arrange for the extension site library to provide inter-library loan services for the students and faculty of the extension courses.
- We should develop a program for library and bibliographic instruction.

- We would require one of the professional librarians on our staff and the circulation assistant to be the liaisons with the extension site's host institution's library and the extension site's students and faculty, in order to see that quality library service would be provided and to foster the development of our seminary's off-campus library services program.
- We would get the bibliography of resources needed for a particular extension course from the professor who would be teaching the course well in advance in order to be able to send the list to the extension site's library so that they could check it against their holdings. What that library did not have would be sent from our library to be available for the duration of the course.
- We would provide the extension site's library with a CD-Rom copy of our library catalog and/or arrange for on-line access to our catalog when that possibility came to fruition.
- We would provide a plan whereby certain fees for services (namely, photocopying, inter-library loan, and database searching fees) would be paid by the student, while other charges (library or bibliographic instruction, bibliography checking, library hour extensions, and unpaid fines and replacement charges) would be paid by the Graduate Studies Office, and still other costs (staff assistance, telephone charges, etc.) would be paid out of library accounts.
- We would arrange for the extension students and faculty to receive seminary identification cards to enable them to prove that they are bona fide graduate students of our seminary. This would enable them to use some libraries, such as Brock University, free of charge, and identify them to our extension site libraries as students and faculty of our extension and therefore possessing certain rights, as had previously been arranged.
- We would work toward establishing a quarterly fee to be charged to students at the thesis or dissertation stage to help recoup the costs of continuing to provide them with library resources, faculty advisement, and other seminary services.

THE AGREEMENT

The plan called for entering into understandings with the libraries of the institutions where our extension courses were taught and other institutions close by. Our agreements that were reached with Concordia Lutheran Theological Seminary in St. Catharines, Concordia Lutheran Seminary in Edmonton, and Christ College Irvine arranged for them to:

- Provide for the use of audiovisual materials and equipment by our classes.
- Offer reference service.
- Allow circulation privileges.
- Provide inter-library loan services.
- Maintain reserve collections for courses.
- Shelve and circulate materials sent to them by our library for use during extension courses.
- Provide bibliographic and library instruction when properly requested.
- Extend normal service hours when properly requested.
- Check bibliographies provided by professors of courses to be offered at their extension site.
- Give to the extension courses' faculty and students access to those resources normally provided to guest patrons of their library.

In exchange for providing these resources and services, our institution agreed to:

- Pay for all costs incurred by our students and faculty in the use of their library which they were unable to collect.
- Pay for bibliographic and library instruction costs.
- Pay for the checking of bibliographies.
- Pay for the rental of any audiovisual equipment needed by a faculty member that the institution did not own.

Additionally, in the case of Concordia College in Edmonton, we agreed to pay for the purchase of one University of Alberta library card if they would allow our students and faculty the right to use these University of Alberta library cards to check out materials from the University of Alberta libraries.

Also, it should be noted, that instead of a written agreement from Brock University Library, we received a letter granting our students the privileges we requested. My experience in working with the libraries of large universities is that they are usually willing to informally agree to do certain things. Unfortunately, such letters of permission may require renegotiation with every new library director.

THE FOCUSED VISIT

On December 7 and 8 of 1992, our seminary was visited by the focussed visit team from NCA, with an ATS observer member as well. On the seventh, I was interviewed by one of the team's members. She had previously received copies of my three reports and copies of the agreements that had been arranged. Participating in the interview was our new public services librarian. He was also to serve as extension services librarian to head up our efforts to continue to develop our off-campus library services program.

After the interview, in which we presented all we had done to provide library resources to our extensions and all we hoped to accomplish, I informed the visitor that I hoped to write a paper on my experiences with the development of off-campus library services to seminary extension courses. I asked her if there was anything I could have done better to prepare for the visit or anything that I had forgotten to do in the arrangement for the provision of library resources to our extension courses. She said, "Nothing."

We passed the test. While the team still had some criticisms of our institution and while they acknowledged that we still had quite a few problems to resolve, they felt that we had a workable plan for overcoming them and preventing these problems from recurring.

THE FUTURE

However, that does not mean that we can rest on our laurels. We continue to seek to improve our services to our extension sites.

This summer, our public services librarian will visit our three extension sites to gather the material needed to develop some library instruction materials specific to the site. I will be preparing some bibliographical and library instruction materials for our library that may be of help to him as well.

Next fall I plan to send without charge CD-Rom copies of the ALSA (Area Library Services Authority) Shared Catalog (ASC), on which our catalog resides. Hopefully, when the OPAC (online public access catalog) of PALNI (the Private Academic Libraries Network of Indiana) is operational, we will make that resource available to all of our faculty, students, and extensions that possess the needed equipment for online access to our catalog.

On May 22 and 23, 1993, our public services librarian and I were in Flint, Livonia, Farmington Hills, and Ann Arbor, Michigan evaluating libraries, as our Seminary may begin a pastoral preparation extension in that area. Our public services librarian will probably travel to Selma, AL the summer of 1993 to consider the library resources available at that site for a similar program. So the work goes on.

But hopefully, the next time the visiting team comes around, we'll be praised for our proactive and innovative efforts at providing our extension students and faculty with the library resources they need, instead of having a gun pointed at our head.

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No Site is Too Remote: Taking the Technology to the Classroom

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"Located far away" is the American Heritage (1981, 545) definition of remote. In Arizona, distance education classes are located "far away", far from the main campus in Flagstaff and far from university libraries which can support graduate classes. Even for a class geographically close to a library, the location may be remote for the individual student who commutes, holds a full-time job or who has other time constraints.[1] This is especially true for students who are enrolled in graduate level research classes.

STATEMENT OF PROBLEM

Bibliographic instruction is an integral component of the Northern Arizona University's EDR610, Introduction to Educational Research classes. Students who take the class on the NAU campus receive library instruction in Cline Library in a bibliographic instruction classroom equipped with a computer, CD-ROM drive, overhead projector and LCD unit. As part of the introduction to educational research materials, on-campus students learn how to search ERIC on the CD-Rom. After the instruction students are encouraged to use ERIC on CD-Rom in the Reference Room.

Field-based students who take the EDR610 class in the Phoenix metropolitan area receive the same type of instruction from NAU librarians in Arizona State University libraries and have access to the ASU ERIC databases on CD-ROM.

Field-based students who take the EDR610 class in Arizona towns which lack research libraries need library instruction which is comparable to that given on campus and in Phoenix.

OBJECTIVES

The primary objective of the instruction is to teach students end-user searching in the ERIC database. Field-based students access ERIC in several ways and our instruction must be basic enough to allow them to be successful in different systems. The student may search ERIC at university or community college libraries which have ERIC on CD-Rom. The software available will be Silver Platter or Dialog. The student may search ERIC through the NAU-Carl integrated library system using the Carl search strategy. The student may choose to search ERIC through an intermediary at a community college or public library, through a school system or through the Field Services office.

Students who choose not to use computers may search the print indexes.

Emphasis, therefore, is placed on search concepts. Starting with how to write a search statement, students are taught to use a thesaurus, to use Boolean logic and how to expand and narrow a search. Building upon this base, we then allow time for individuals to work on identifying search terms and the librarian executes searches on the computer for the class to see. The goal for the end of the session is for each group or individual to write out a search strategy which will be taken back or called into Cline Library for completion. The completed search with abstracts will be mailed to the student.

SOLUTION

Based upon need to give the instruction in the classroom, to give instruction in use of the ERIC CD-ROM database and the ability to demonstrate search techniques and variables in search software to the class, the Field Services librarians proposed purchase of portable equipment for bibliographic instruction. We drew up a list of equipment that would be needed: a portable personal computer, a portable CD-ROM drive, an LCD panel and a printer. Since the printer is rarely unpacked during an instructional session, it might be considered a desirable item rather than a necessity.

With the advice and direction of Cline Library's,Systems and Planning Librarian, the following equipment was chosen: Zenith Mastersport 386sx portable laptop personal computer; NEC CD-ROM Reader; Infocus LCD unit; Cannon Bubble Jet Printer BJ-10ex with paperfeeder. Each piece of equipment has a carrying case. Supplementary equipment and supplies were quickly added, including a folding cart, a lamp, a 6 outlet powerstrip, an Elmo portable overhead projector, a screen, and a telephone cord. Items that have been identified for future additions are a pointer, an elastic cord to bind items on the cart, and a heavy-duty 25-50 foot extension cord.

If you are considering a portable workstation, I recommend reading the latest issues of *PC Magazine*, *Technology and Learning* and other technology magazines. Other sources for equipment ideas include audio-visual and computer equipment dealers, trade shows, and library conference dealer's exhibits. We chose the Zenith because of its portability, because it would interact with the NEC CD-ROM reader and because we operate in an IBM compatible environment.

This spring, as it became evident that one set of equipment was not sufficient, we have ordered new equipment. The original equipment will become backup and bibliographic instruction will be done on a Nomad 450 DXL, an NEC Multispin 38 portable CD-ROM, an Infocus Panel Book LCD and a Hewlitt Packard portable DeskJet printer. (See appendix)

PRACTICAL APPLICATION

When class schedules are released for a semester, the Field Services librarian contacts all faculty who are teaching EDR 610 in the field to schedule bibliographic instruction. Normally the instruction is planned early in the eight-week class session, at the time related literature is reviewed and once the students have been assigned the research requirements of the class. Because several classes start on or near the same date, because only two librarians are available to travel at a time and because there is only one set of equipment, travel time must be carefully scheduled. The classes which meet in Phoenix are scheduled at Arizona State University Libraries and the rest are scheduled for bibliographic instruction in the classroom. It is common for a librarian to meet with classes on consecutive nights which are fifty to two-hundred miles apart.

After consultation with the faculty member, decisions are made concerning the length and content of the presentation, what handouts will be used and the length of time available for librarian assisted searching. A memo will be sent to the faculty member confirming the date and time, and the coverage that was agreed upon. One copy of each handout is enclosed with the memo.

The librarian pulls master copies of handouts from a file and indicates to the Field Services staff how many copies are needed and the date by which they are needed. The staff will make the copies and collate them into individual packets. The librarian will then choose books to take to the class. These include copies of the *Thesaurus of ERIC Descriptors*, *RIE* and *CIJE*, samples of major educational research journals, etc. The books chosen will vary depending upon the teaching style of the librarian. Boxes of material are labeled with the name of the class, the faculty member and the date, time and location.

The day before the class the librarian packs the equipment. Between instructional sessions the laptop computer, the CD-ROM unit and the printer are used as desktop equipment by the librarians. Using a checklist, each piece of equipment is placed in its carrying case and on the cart. If books and equipment will not fit on the cart at the same time, a booktruck is used to convey the extra materials to the vehicle.

When the class site is reached, the librarian locates the classroom and moves the equipment and books into the room. If the class is in session, the instructor normally allows a fifteen to twenty minute break. During this time the equipment is set up and material to be passed out is placed for students to pick up as they reenter the room.

An experienced librarian can set up the complete workstation in fifteen minutes. A novice will want to request more time. Setting up involves unpacking equipment, attaching cords, and testing the equipment to be sure everything works. The presentation takes from 1-2 hours and includes doing searches on specific topics chosen by the students.

Librarians on our staff have a common goal and objectives but approach instruction differently. It is common to present information using lecture format and transparencies, then to use the computer to demonstrate a sample search. The class may be divided into teams to provide active involvement in setting up a search strategy. One successful method of teaching is to let each group establish a search strategy, to execute the strategy in the computer, then to write out the strategy to be taken back to the library for the complete search to be run. This gives the students the opportunity to see how much information is available on the topic and to see how the librarian processes the search. The method used varies depending upon the amount of time available.

When the presentation is over, the equipment is repacked--again using the checklist. Often students volunteer to aid in returning equipment to the vehicle.

The key to taking technology to the classroom is careful planning and keeping the presentations simple.

WHY PORTABLE EQUIPMENT?

The rationale for using portable equipment is the same as that for using equipment for bibliographic instruction in general. According to Wright and Friend (1991), electronic database searching instruction needs to be incorporated into all class presentations where their content is appropriate. Texas A&M University librarians found transporting equipment to classrooms on their campus to be a positive experience that benefited the patrons and allowed them to reach larger audiences (Jaros & Clark 1989). Other advantages include ease of instruction and the ability to interact with the database via the equipment. Presentations can be viewed by the class as a whole. Search strategies can be altered for everyone in the class to see. The CD-ROM technology allows searchers to cover multiple years of a database. Boolean searching and nearness operators can be demonstrated with instant results being displayed. The equipment also has advantages over other types of instruction, such as videotaped presentations, because teaching can be flexible, adapting to the class.

Disadvantages include the physical effort involved in moving the equipment. Set-up and take-down time reduces the amount of classroom presentation time. Occasionally equipment fails. The equipment causes physical barriers in the classroom. The screen may not be easily read from all parts of the classroom. The overhead projector needs to be at the front of the room and the equipment or the librarian may stand between the class and the screen. Working in a dark room causes problems with note taking and with working on the keyboard. None of the disadvantages outweigh the advantages.

ADVICE

We have been using portable equipment for instruction for over a year. The first piece of advice I would offer would be to have a backup set of equipment. Whether the equipment is not available because of conflicts in class scheduling or because a component has stopped working, a backup is necessary.

Prepare for failure. Have transparencies as a backup. Unfortunately equipment failure may not reveal itself until you are in the classroom. Have copies of the transparencies to pass out to students. The less note-taking required the more time spent in concentrating on the presentation.

Have a presentation that can be shortened if need be. Plan for classrooms not being open on time, or faculty deciding to shorten your time due to a last minute change in plans.

Label all cords. With my equipment, there is a correct sequence in which equipment must be turned on. If the LCD panel is connected before the CD-ROM software is running, the LCD panel will not work. Have plain, brief instructions in writing.

Follow your instincts. You will be advised that any overhead projector will work and that a wall will do for a screen. Carry your own projector and screen, just in case. Some overhead projectors lack the light intensity which works best with an LCD panel. Walls do not make good screens.

Create a checklist. Use it when packing to leave the library. Use it when packing in the classroom. If volunteers offer to help, pack the equipment yourself. Do not let anything leave the room until all components are accounted for.

Pack the cord which runs a particular piece of equipment with that piece of equipment. This will save time in setting up the equipment. Also, cords are similar in appearance and can ruin equipment if plugged into the the wrong piece.

IMPACT ON FIELD SERVICES LIBRARIANS

The Field Services librarians have been enthusiastic about using the portable work station. Teaching methods have been revised to accommodate the technology. The equipment, however, is treated as a tool which adds value to the bibliographic instruction unit. When the equipment is not available, librarians revert to methodologies previously used.

CONCLUSION

Not every distance education program will have the need for portable equipment, nor the budget to support the technology. For the libraries that have similar needs, the portable workstation is a viable alternative.

APPENDIX

Portable Workstation
Field Services Department

Nomad 450 DXL 50 MHz 486 DX2 Intel processor, 8MB RAM, 3.5" floppy drive, 200 MB IDE hard drive, backlit VGA screen, 64 grays, 5.6 lbs., simultaneous video with 1MB, 6 hr. nicad battery and AC pack, 1 parallel and 1 serial port, 79 key keyboard and field mouse, MS-DOS 6.0 and Windows 3.1, MS Works for Windows 2.0, 9600 baud modem, carrying case.

NEC MultiSpin 38 portable CD-Rom with parallel/SCSI interface.

Infocus Panel Book LCD panel and C96 hard case.

Hewlett-Packard portable DeskJet Printer and carrying case, and Hewlett-Packard portable Deskjet 50 page cut sheet feeder.

Approximate cost: $10,000.

NOTES

1. For further information on NAU Field Services and the students enrolled in the program see Jaggers, 1991.

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Using Technology to Provide Library Services for a Branch Campus In Europe

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BACKGROUND

Sacred Heart University was founded in 1963 as a coeducational independent institution. It is located in Fairfield County, Connecticut, only an hour from New York City, and in the center of headquarters for many of the largest international corporations. Over twenty-five bachelor's programs are offered as well as four post graduate degree programs including a Master of Business Administration. In recent years, branch campuses were established in several areas of the state, each of them emphasizing different areas of study. At one branch, a business degree is given, at another a Masters in Education, and a third concentrates on general studies. Library services are provided at each site as required by the State of Connecticut Department of Higher Education regulations.

The establishment of the Luxembourg program was part of the university's plan to broaden its scope internationally and provide exchange and learning opportunities for students and faculty. Luxembourg is a center of international banking and the site of many international corporate offices. The European Parliament is located there as is the European Investment Bank, the financial institution of the Common Market. When the decision was made to establish an MBA program at a branch campus there, it was determined that the State of Connecticut regulations for accreditation would apply and that library services would need to meet those requirements.

In planning library services for the Luxembourg program, three main concerns were identified. The accreditation issue was most important. The absence in Luxembourg of a system of higher education, of academic libraries, and of established library cooperation with other countries, prevented us from interacting with a structure already in place. A third issue was that available technology was incompatible with that in the United States.

ACCREDITATION REQUIREMENTS

Connecticut's accreditation requirements for academic libraries serving off-campus, degree-granting programs are very specific as to collections, staff and budget.

- Core Collection A collection of both circulating and reference materials sufficient to meet the needs of both students and faculty must be provided either at the site or via written agreement with a nearby library.

- Reserve Reading A reserve collection must be provided at or near the site.

- Staff Professional library staff support for library services must be provided at or near the site.

- Additional Materials The core collection must be supplemented by additional materials such as those electronically accessed, and by a document delivery system.

- Budget Adequate annual budget support must be provided for library resources at or near the site.

Sacred Heart had already had experience with the accreditation process at its branch sites in Connecticut. The state requirements were met in a variety of ways. An analysis was made of the needs of the programs, the available resources at or near the sites, and the cost of resources needed to conform to the regulations.

The cost of establishing new core collections was prohibitive. It was decided to meet this requirement by entering into a written agreement with nearby libraries for the use of their collections. After investigating various options, we entered into an agreement with the University of Connecticut Libraries which for a fee provided services throughout the state. Their main campus is near one of our sites, and branch libraries are located near our other sites.

At each of our branch campuses in Connecticut, we fulfilled the reserve reading requirement by setting up reserve areas or rooms stocked with materials on reading lists and materials requested by faculty. These areas also contained some basic reference materials needed for courses taught at the site.

The staff requirement is met by the hiring of a part-time librarian at each site who usually works evening and weekend schedules when they are most needed to serve the part-time students. Their responsibilities are to assist students and faculty, maintain the reserve collection, recommend materials for purchase, refer students to the core collection sites, obtain materials from other collections or document delivery vendors when necessary, and compile usage statistics.

Obtaining additional materials to supplement the core collection is done primarily by electronic means. Each site has dial access to OCLC and Dialog, and fax equipment to facilitate document delivery. The Sacred Heart main campus library also provides materials when available.

Each branch has its own budget which is overseen by the director of the program. The budget for branch campus libraries is overseen by the main campus library. The university librarian is responsible for recommending and implementing budget support for necessary acquisitions and services.

LUXEMBOURG BRANCH CAMPUS

Sacred Heart University established an MBA program in Luxembourg after it was determined that there was a need there for an English language, part-time program. Luxembourg is an international banking center in which are located corporations from around the world. Employees of these corporations are also from all areas of the world. Their common language is English, and they hold a variety of types of bachelor's degrees. A number of them expressed interest in obtaining an American MBA degree if it could be done on a part-time basis and scheduled around their professional responsibilities.

Sacred Heart's program presents night classes in intensive six-week segments. This enables students to obtain the degree in two or three years. There are over one hundred students in the program, representing twenty-six countries. Faculty are selected from the main Connecticut campus and from professional experts in their respective fields who may be living and working in Luxembourg.

An investigation into the availability of local resources to support library services revealed that the traditional framework did not exist in Luxembourg. The Centre Universitaire which houses our program is actually at secondary and technical school level. There is no system of higher education, and Luxembourg students go to other countries for their post-secondary degrees. There is no library serving higher education, no existing arrangements among libraries for reciprocal use, no interlibrary loan or document delivery, and no contact with libraries in nearby countries. European technology is not compatible with American technology which means that equipment must be adapted to interface with American databases.

LUXEMBOURG LIBRARY SERVICES

Since there was no nearby academic library which could provide services, and the cost of establishing a core collection was prohibitively expensive, alternative ways of meeting this accreditation requirement were explored. In discussions with network representatives, publishers, and technology vendors in this country, we were advised to initiate contact with their European representatives who were usually headquartered in Great Britain. There were no vendors providing the kind of services we wanted in or near Luxembourg. We also contacted various international corporations and government bodies in Luxembourg for information on the availability of library services in their institutions. It became obvious that we would need to develop a combination of specialized resources selected from a wide geographical area, and that access to resources was more feasible than ownership.

Since the Luxembourg program is entirely devoted to the MBA degree which places heavy reliance on business journals, it was decided to create an instant periodical collection by the installation of UMI's *Pro-Quest Business Periodicals Ondisc* on CD-ROM. The database indexes 800 business journals and provides the full text of 400 of those journals. The system was installed in the Centre Universitaire and is a very popular centerpiece of the library services there. It received much publicity in the local press and is available for use by residents as well as our students. The equipment was purchased in Europe and adapted at additional cost. Although the cost substantially exceeds what it is here, we feel the benefit to our students justifies the added expense.

The core collection of books is provided by several libraries. In the absence of academic libraries and given the nature of our program, written agreements were entered into with the libraries of the European Investment Bank and the European Parliament for the use of their collections. The library of the Centre Universitaire, where our program is housed, is also available to our students for supplementary materials. The core collection requirement for accreditation is therefore met by these three libraries plus the *Business Periodicals Ondisc*.

The reserve reading requirement has been met in the same way it is at our Connecticut sites. Materials on reading lists or requested by faculty are acquired and made available in a separate room in the Centre Universitaire Library.

Materials not available locally are obtained from the British Library Document Supply Centre, the nearest and quickest available resource that can supply the major portion of our supplementary needs. It is planned that OCLC Europe will be used as an interlibrary loan resource for books. Both of these resources can be accessed electronically from our Centre Universitaire facility.

The staffing requirement has been met by hiring a Centre Universitaire librarian to provide services to our students part-time, evenings and weekends. The librarian provides assistance in the reading room and with the CD-ROM workstation, makes referrals to the other cooperating libraries, and arranges for document delivery from remote locations when necessary.

A budget is in place to support all of the services described. The initial plan called for a three-year implementation process ending in 1994. At that time, the cost-effectiveness of the library services will be evaluated and adjustments made if necessary.

CONCLUSION

Although the Luxembourg program was the first branch Sacred Heart University established outside the United States, our experience in Connecticut helped us to focus on what we needed to do to fulfill accreditation requirements. Exploring our options in Europe required additional time for the process, but the end result was that we could provide adequate services with what was available there. The flexibility provided by Connecticut accreditation regulations about how core collections can be established gave us an opportunity to be creative and practical at the same time. We use local resources when available, provide electronic resources such as CD-ROMs on site, and provide online access to remote resources when necessary. The ability to contract for some library services and to have remote access to others has made it possible for academic institutions to establish programs in almost any location in a short period of time with comparatively little effort, and at a reasonable cost. Using technology within the framework of accreditation requirements has enabled us to provide effective library service at our off-campus sites.

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Distance Education and the Virtual Library: Developing and Applying the Model

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INTRODUCTION

The impact of technological advancements has been felt on college campuses across the nation. This is particularly evident in libraries and in outreach, or what is commonly referred to as distance education.

Until recently, these technological changes in libraries and outreach have been parallel, but somewhat independent, in their developments. Although there may have been some overlap, the primary purpose of technologically upgrading libraries was to provide greater access and improved services to benefit on-campus students, whereas the primary focus of integrating technology into outreach programs was to improve service to a constituency off-campus and to facilitate the wider dissemination of research (Whitson, Cottam & Van Arsdale 1991).

Increasingly, the separation between these entities at the University of Wyoming has diminished. Advances in technology have brought about an interface between libraries and distance education programs. The purposes of this paper are to describe the parallel development, to discuss the areas in which they interface, and to indicate how this interface has contributed to the realization of the virtual library. Because these developments are evolving, we will also discuss some of the developments we envision for the future. Using the University of Wyoming as a case study, we will show how connections and collaboration have enhanced both domains. We begin by describing distance education in general and more specifically the University of Wyoming experience.

DEVELOPMENT OF DISTANCE EDUCATION

Distance education is not easily defined, and the definition varies depending on the orientation of the person doing the defining and the context in which it occurs. All definitions of distance education include the partial separation of teacher and learner and, by implication, some means for accommodating that separation. Thus, for the purposes of this paper, we subscribe to Garrison and Shale's (1987) criteria that distance education entails: noncontiguity of teacher and student, two-way communication as a means of supporting the educational process, and the use of technology "to mediate the necessary two-way communication" (11).

At the risk of oversimplifying, distance education is "education at a distance": education inferring a process of two-way communication, distance inferring geographical separation, and technology implied as a means of accomplishing the two-way communication.

While this paper focuses on the latter two, geographical separation and technology, because of their relationship to the virtual library, the assumption that education is a communicative, interactive process is essential. "The act of teaching is not simply to pass on content as if it were absolute truth...Teaching is the integration and balancing of content and process issues. In this way teacher and student are interdependent and in the best sense of education are in a collaborative relationship" (Garrison 1989, 12).

The reason for stressing the collaborative relationship between teacher and student (and among students) will become clearer as issues relative to the virtual library are discussed. Suffice it to say here that it is the collaborative nature of education which necessitates technology in situations where the student is separated from the teacher. Consequently the history of distance education depends heavily on innovations in technology.

Garrison (1989) makes the point that distance education is influenced by two factors: periods of transition or development and concomitant advances in technology. In many instances, the growth of distance education was spawned by demographic factors but made possible by new communications technology. Later in this paper we will look at demographic factors which are influencing distance education today.

First, it behooves us to trace the role of technology in distance education, beginning with correspondence study. While some may not equate the postage stamp with communication technology, the initiation of the stamp made it possible to facilitate the educational transaction at a distance using print-based materials and to rely on the mail for two-way communication. Later, print materials were augmented by broadcast media such as radio and television, but the interaction between student and teacher was written communication which by definition was asynchronous. That is, teacher and learner were separated by time as well as place.

The invention of the telephone and its subsequent inclusion in distance education changed all that. Teleconferencing made two-way communication in real time possible among teachers and students. Garrison (1989) suggests that "[T]eleconferencing...represents a paradigm shift in facilitating and supporting learning at a distance...Of all the means used to support distance education, teleconferencing most closely simulates the transaction between teacher and students in a contiguous or conventional form of education. The exchange is conversational in nature, it may be spontaneous, and it is immediate" (Garrison 1989, 66). More importantly, it is a group method of learning.

Succeeding innovations have enhanced audio teleconferencing. Audiographics allow for the transmission of visual information (print or images) in conjunction with the audio transmission. Video conferencing permits students to see the teacher and the teacher to see the students. The computer adds several different functions: computer conferencing, electronic mail, access to electronic databases, and such administrative functions as the ability to update curriculum, transmit computer assisted learning software, and monitor computer managed learning.

Historically, distance education falls along a continuum reflecting the technology available and the philosophy of the providers. At one end of the continuum is the correspondence model which stresses the independence of the learner and emphasizes access over communication. The model depends on adequately packaged self-contained materials for the transmission of knowledge. At the other end of the continuum is the university model which views distance education as an extension of on-site education. This model seeks to maximize communication, acknowledges the interdependency between teacher and students, and may even include some on-site instruction. Many models lie between these two extremes.

What follows is a description of the distance education program at the University of Wyoming, a program exemplifying the university model. The reason for describing this program in such detail is to make explicit the factors in distance education which are coherent with the concept of the virtual library.

DISTANCE EDUCATION AT THE UNIVERSITY OF WYOMING

The University of Wyoming has a long history of outreach to the state. The University is the only four year higher education institution in a state that boasts 98,000 square miles of geography and approximately 450,000 people. With few population centers large enough to warrant satellite facilities, the only solution to increasing demands for off-campus programs has been to send faculty to the field or to utilize technology to "send" the classes.

The University was a pioneer in offering credit courses through extension as early as 1891 (Johnson 1983), and multiple delivery approaches has been the institution's hallmark since that time. Classes have been delivered by faculty traveling by car, train, airplane and by faculty using every conceivable available media. This is important. The willingness to use whatever technology is appropriate, bearing in mind that part of the University's mission is to offer sitebound students the equivalent of what they would get on campus, has placed the University of Wyoming in the forefront of distance education providers. While not a large program, considering the size of the University and the state, the program exemplifies sound distance education practice.

Although multiple delivery modes were used prior to 1984, commitment to using technology began in earnest that year with the opening of the Office of Teleconferencing. Similarly, the commitment to support university-wide programs began that year. Before that time, most of the credit courses offered off campus were education courses provided to practicing teachers who needed certification. Occasionally, an **ad hoc** class was offered in another discipline.

The addition of the Office of Teleconferencing opened up the possibility for offering degree programs in a number of areas. The University currently offers degree programs in social science, public administration, business, nursing, the administration of justice, speech pathology, as well as education. Additionally, it supports certification programs in education, early childhood, and surveying (engineering).

The focus on degree programs has had a great impact on library outreach and has generated greater interest in the virtual library concept. The need for adequate library resources is acknowledged as a prerequisite for degree programs. Whether to appease accrediting bodies or to satisfy campus departments and administration, library support is mandated.

EMERGENCE OF THE VIRTUAL LIBRARY

○ " Virtual library emerges at Columbia Law Library"

○ "Library of Congress makes newsletter available electronically"

○ "Stanford University provides computer access to complete catalogs"

These phrases are headlines from recent newspapers and journal articles. They all have one thing in common: proclaiming the reality of the virtual library. While the notion of a virtual library is not new, controversy and confusion still exists with respect to an agreed upon and acceptable definition. Van Fleet & Wallace (1993) claim that the term virtual library is a catch phrase that is becoming more common, but how does the virtual library differ from the concepts of an electronic library, logical library, or a library without walls?

In 1980, A.J. Harley noted the virtual library was similar to a virtual machine. "It gives its users the illusion of access to resources far greater than those actually present" (Schiller & von Wahlde 1992, 3). Years later the debate continues and the notion of the virtual library remains vague and amorphous. Saunders (1992) describes it as "a system by which a user may connect transparently to remote libraries and databases using the local library's online catalog or a university or network computer as a gateway" (66).

A PACS-L electronic bulletin board message recently queried participants about their definition and perception of the virtual library. One individual noted, "a virtual library, like virtual memory is something that is there; that isn't there" (Watts 1993). Another relates the virtual library to the use of a remote OPAC. "A real library exists but not where the user is located or not according to his/her perception." Yet another respondent stated, "I think what most of us call the virtual library is probably more aptly titled 'the electronic library' but virtual sounds much sexier and cutting edge" (Elliott 1993).

Raymond Kurzweil (1993) contends that a library will continue to be a storage facility, preserver of ancient technology, a collection of signs and symbols reflecting the memory of civilization and an institution which disseminates and preserves knowledge. The virtual book and virtual library are simply the means by which we enhance and expand the functions of a library's fundamental tasks. Similarly, a quote from the PACS-L electronic bulletin board expressed that, "even though information may be accessed electronically, it is still a library; the mode of information access and delivery has changed" (Williams 1993).

In a University of Alberta strategic planning document, the idea of a virtual library was defined in terms that were primarily client driven activities and collection development decisions. They defined the virtual library as ". . . demand-driven rather than supply oriented, it is based on the specific information needs of the clients, not 'speculative' acquisition and warehousing of a broad range of resources. Its success depends on assured and timely physical access to materials through interlibrary loan, embracing document delivery methods ranging from courier services to FAX to electronic file transfer" (Schiller & von Wahlde 1992, 5).

In January of 1992, Schiller and von Wahlde conducted a survey to determine the progress ARL libraries had made in realizing the virtual library. Several activities were identified which were considered elements or components of the virtual library:

- Electronic delivery
- Electronic journals
- Full-text databases
- End-user searching
- Training
- Network access
- OPAC enhancements
- Strategic planning
- Cooperative development of databases and hardware
- Access over ownership - policies, services and strategies

UW AND ELEMENTS OF THE VIRTUAL LIBRARY

Libraries have been moving toward the virtual library concept for the last twenty years, and the University of Wyoming Libraries system is no exception. Yet we are only now beginning to critically assess those activities which are considered components of the virtual library, such as online catalogs, electronic information networks, full text databases and electronic journals. By considering each of the Schiller/von Wahlde elements separately, the University of Wyoming Libraries conducted an assessment to determine progress toward realizing the virtual library.

While most libraries' technological initiatives have been developed to address on-campus needs, there have been significant applications and demands from the off-campus population. Within the context of achieving the virtual library, and at the same time meeting off-campus student needs, the chart below identifies virtual library elements or components and how the University of Wyoming has responded. In addition, the chart includes other organizations and institutions in Wyoming which have become important partners in the outreach services community. Although this chart and the following discussion describes the UW experience, we believe it could be used as a framework for assessing other programs, or it may be used as a planning tool for considering new programs and services.

ELECTRONIC DOCUMENT DELIVERY

In the broadest context, document delivery must address all of the processes involved that relate to electronic document delivery services. There are three activities required which eventually result in the delivery of a specific document. First, the user must have access to citations or bibliographic records. Eventually, the end-user will be able to move directly from a citation to the full-text document. Second, there must be an established method for communicating the request, such as use

COMPARISON OF ELEMENTS OF A VIRTUAL LIBRARY IN WYOMING

ELEMENTS OF A VIRTUAL LIBRARY	UW LIBRARIES	WYOMING COMMUNITY COLLEGE LIBRARIES	WYOMING PUBLIC LIBRARIES	OTHER
Electronic Document Delivery	Ariel; UnCover2; Fax; E-mail	Ariel[1]; UnCover2; Fax; E-mail		
Electronic journals or documents	Internet	Internet		
Full-text databases	CARL; CD-ROM Technology; Internet	CARL[2]; CD-ROM Technology; Internet	CD-ROM Technology	
End user searching	CARL; LAN–CD-ROM Technology; OCLC FirstSearch; Internet	CARL[2]; CD-ROM Technology, OCLC FirstSearch, Internet	OCLC First Search	Internet
Training--Providers of training	CARL; Ariel; CD-ROM Technology; LAN access and use	CARL[2]; WYLD; Internet	WYLD	Internet
Network Access	Wyoming Community College Commission fiber optic network; CARL; Campus LAN; Internet; WYLD	CARL[2]; WYLD; Internet		
OPAC Enhancements	CARL			
Strategic Planning	*Intra-Institutional* UW Outreach Council *Inter-institutional* Academic Library Director's Consortium; UW/Comm. College Cooperative Agreements; UW/CC Library Services Contract *CARL* - Strategic Planning meetings	*Casper College* - Memorandum of Implementation Academic Library Director's Consortium		
Cooperative Development of Databases & Hardware	CARL; Gateway Technology	Gateway Technology	Gateway Technology	
Access over ownership. Strategies, Services, Policies	UW Libraries - Pilot study on access & article delivery, UnCover and UnCover2; ILL agreements			

1. Installation depends on grant funding.
2. University of Wyoming and community college cooperative agreement installations.

of the OCLC interlibrary loan subsystem or Uncover2. The third activity is actually delivering a document directly, by ILL or electronically. Present methods still require human intervention whether using traditional or electronic means.

The types of electronic delivery systems available to the off-campus community are primarily fax machines located throughout the state and dedicated to serving UW off-campus students. Although Ariel is available on-campus, the university is working cooperatively with the state's community colleges to obtain funding for the installation of Ariel workstations in seven of the community college libraries and one community college branch site. CARL's UnCover and UnCover2 are used to access, request, and deliver journal articles via fax technology. This service is available to individual students at remote sites, or the Libraries Outreach Services Office will complete the transaction by submitting the request for the student and delivering it by fax or mail.

ELECTRONIC JOURNALS

At UW, the internet is presently the only source available for accessing electronic journals, a resource used primarily by faculty and program administrators throughout the state. Eighteen months ago an internet connection was not technically feasible in most locations in Wyoming. As appropriate technology has been installed, access to the internet has encouraged communication and increased access to additional library catalogs and the few electronic journals available. Interest has grown to such an extent that library staff frequently receive telephone calls from off-campus faculty asking about Gopher, Veronica, or Archie. The internet has become the global village for the off-campus community to connect with other library catalogs, subject specific bulletin boards, information databases, and electronic journals (Page 1993).

The UW Libraries are considering a subscription to ADONIS which provides access to over 500 full-text journals utilizing CD-ROM technology. As libraries move toward electronic journals, there remain numerous details to consider including accessibility by, and delivery to, the off-campus community.

FULL-TEXT DATABASES

UW's membership in the Colorado Alliance of Research Libraries (CARL) since 1989 has truly created a library without walls for the off-campus community (Cottam & Stewart 1990). Remote access is available to any UW student in the state who has access to a PC and modem. They have access to UW's online catalog and other library catalogs located from coast to coast. Users also have access to numerous information databases such as *ERIC*, *Expanded Academic Index*, *Magazine Index*, and *Business Index*. Some of the information databases have full text and document delivery capabilities which are available to students for a fee. The full text publications on line include *Grolier's American Academic Encyclopedia*, *Choice* book reviews, and a journal titled *On-line Libraries*. UnCover and UnCover2 are used for rapid document delivery of journal titles.

The internet is also a source for numerous information databases ranging from weather forecasts to the international center for distance learning database located in the United Kingdom. Krol's book, *The Whole Internet* (1992), is an excellent source for identifying catalogs and information databases.

Full-text, subject specific, CD-ROM products are widely available throughout the UW Libraries system and a few are located in Wyoming's community college libraries and public libraries.

The Libraries are investigating the possibility of connecting to a CD-ROM jukebox attached to a microcomputer in the University's Computer Center. Any individual with a campus LAN connection could access the CD-ROM databases. For off-campus dial-in access, there would be an intermediate front-end microcomputer required for a connection to the CD-ROM server. Some of the databases would be permanently loaded and others could be requested and loaded on a temporary basis depending on the needs of the user.

END-USER SEARCHING

UW is planning to participate in OCLC's FirstSearch. The Library Outreach Services Office is particularly interested in this service for off-campus clientele and the possibility that we can link students and faculty remotely to such a wide range of databases. We know the technology exists. However, working out the logistics of access, use, and cost will be a challenging exercise. A few public libraries and a community college library currently subscribe to FirstSearch, but the public does not search the system. Rather, all searches are conducted by library staff.

Off-campus UW students currently have limited end-user searching capabilities to the CARL system. This will change in the future as the CD-ROM databases are mounted on the University's LAN and dial-in access to the CD-ROM servers is made available to off-campus users.

TRAINING

As an element of the virtual library, the sources or providers of training are perhaps more important than addressing specific how to training. When identifying training sources, we first considered the following sources/providers:

- The University provides training originating with library personnel who train users on how to access and use CARL, interlibrary e-mail protocols, Ariel, and dial in access to the CD-ROM servers. University computer technology personnel also assist with LAN and internet training.
- Regional network offices, such as the Bibliographical Center for Research, provide knowledgeable and skilled training for the internet, OCLC, hardware configurations, and software.
- State resources, including State Library personnel, are viable alternatives for training in the areas of gateway technology and system development, hardware development and software protocols.
- Consultants and specialists are called upon to conduct workshops and in-service training sessions.

In the past, the UW Libraries have provided traditional training opportunities, such as both on-site and audio teleconferencing bibliographic instruction as well as videotape presentations. We are looking at new ways to utilize existing technology for training purposes. Compressed video and access to online instruction manuals are two possible approaches for teaching users about new technologies.

NETWORK ACCESS

The CARL system is the primary network for the University of Wyoming. The breadth and scope of this network were described earlier in this paper. The Wyoming Community College Commission is the link for CARL access to the community colleges. We are presently investigating ways in which the campus LAN can address and accommodate off-campus student needs. The University Libraries are also a participant in Wyoming's statewide library database (WYLD). Finally, the internet is a global network which enables access to a variety of information sources.

Other operational networks are identified in the map presented below. The Cooperative Extension Service (CES) Network provides dial-in access to bulletin boards and weather services. PSInet (People Sharing Information network), an electronic educational bulletin board, is available via free dial-in access for all K-12 public school districts throughout the state.

OPAC ENHANCEMENTS

Because of the University's involvement with the CARL system, all OPAC enhancements have originated from that source. Recently, some of the enhancements have included loading of additional local databases and *Journal Graphics Online* database. Authority control is in the forefront of forthcoming enhancements since it will have far reaching consequences in searching online library catalogs. The ERIC database is being re-indexed to incorporate minor descriptors. Other changes planned for the future which will impact the off-campus community include self generated holds, renewals, and interlibrary loan requests.

STRATEGIC PLANNING

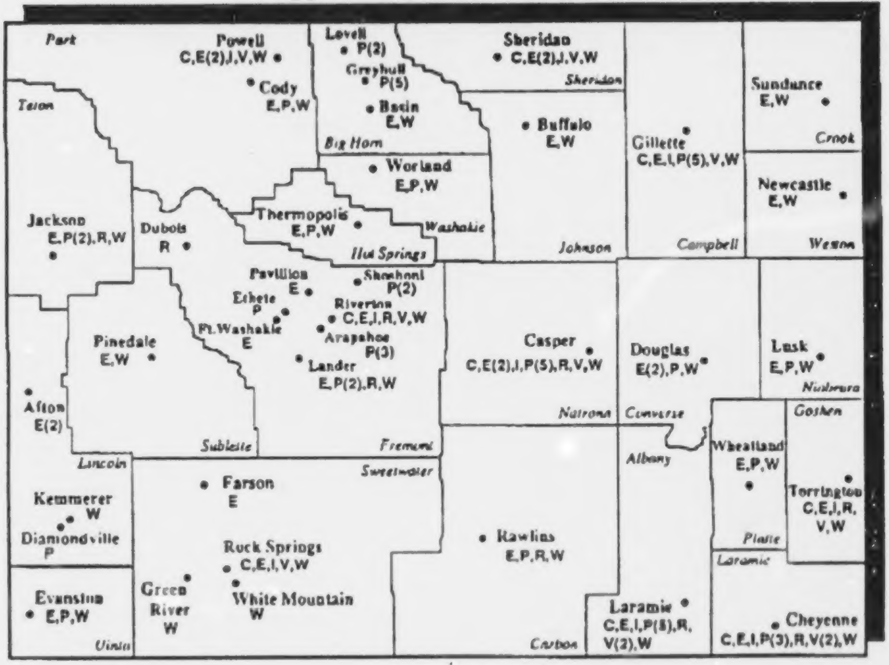
Strategic planning occurs at several levels. At the institutional level, an Outreach Council consists of representatives from major outreach units, including the Libraries. Its purpose is to plan, communicate, and coordinate the diverse array of education and information services which exist for the off-campus population.

The Libraries have one contractual agreement with Casper College to provide library services to a branch of the University located on the college campus. Each year a performance contract and memorandum of implementation are developed between the UW Libraries and the Casper College.

In 1992, a state Academic Library Director's Consortium was established to facilitate strategic planning and encourage cooperation among the community colleges and the University. As a result of these efforts, an HEA Title II-A grant proposal was submitted to establish a gateway between the statewide library database (WYLD) and the CARL system.

The State Library has also coordinated another planning effort, and a strategic planning document was prepared by a statewide network planning team. The report recommended several activities

Electronic Outreach Services in Wyoming Supported by the University


Park
Powell
C,E(2),I,V,W
Cody
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Lovell
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Greybull
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Basin
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Big Horn
Sheridan
C,E(2),I,V,W
Sheridan
Sundance
E,W
Crook
Teton
Buffalo
E,W
Gillette
C,E,I,P(5),V,W
Worland
E,P,W
Newcastle
E,W
Jackson
E,P(2),R,W
Dubois
R
Thermopolis
E,P,W
Washakie
Hot Springs
Johnson
Campbell
Weston
Pavillion
E
Shoshoni
P(2)
Ethete
P
Riverton
C,E,I,R,V,W
Ft.Washakie
E
Arapahoe
P(3)
Pinedale
E,W
Lander
E,P(2),R,W
Casper
C,E(2),I,P(5),R,V,W
Douglas
E(2),P,W
Lusk
E,P,W
Niobrara
Afton
E(2)
Natrona
Converse
Goshen
Sublette
Fremont
Lincoln
Sweetwater
Albany
Wheatland
E,P,W
Farson
E
Torrington
C,E,I,R,
V,W
Kemmerer
W
Diamondville
P
Rock Springs
C,E,I,V,W
Rawlins
E,P,R,W
Platte
Laramie
Evanston
E,P,W
Green
River
W
White Mountain
W
Laramie
C,E,I,P(8),R,
V(2),W
Cheyenne
C,E,I,P(3),R,V(2),W
Uinta
Carbon

C = Dedicated connections to CARL Library database (dial-in access is possible from anywhere in the state, although there are no toll-free facilities).

E = Cooperative Extension Service (CES) Network (numbers in ( ) indicate multiple locations). Additionally, some locations, as well as individual producers, use dial-in access to bulletin boards and weather services.

I = INTERNET access. UW is the point of presence for Wyoming through its affiliation with WESTNET. As of January 1993, there were 1.3 million host computers connected to INTERNET throughout the world.

P = PSInet (People Sharing Information network) Toll-free dial-in access provided to K-12 schools by WIDT.

R = Wyoming Public Radio

V = Compressed Video Conferencing Facilities. Equipment provided by UW, communications circuits provided by state Telecommunications Division, community colleges provide space for facilities at their sites.

W = Access to UW Library information through Wyoming Libraries Database (WYLD) located in Cheyenne. Communications circuits provided by state Telecommunications Division.

27 May 93

addressing library technological, networking, and training needs of the state. If the report's recommendations are implemented, they will directly impact distance learners.

As a member of the CARL network, the UW Libraries participate in CARL's strategic planning initiatives, and the CARL governance structure.

COOPERATIVE DEVELOPMENT OF DATABASES AND HARDWARE

Cooperation at the institutional, departmental and unit level is essential to the planning and implementation of outreach technological initiatives. In fact, on-campus cooperation at the program coordinator level appears to be the most successful approach for addressing the unique needs of the off-campus community. For example, the Libraries have worked closely with the campus Information Technology Division which is responsible for campus-wide computer systems and training. We have worked with them in the past to insure that off-campus students have remote access to CARL utilizing the campus computer connection to the CARL computer located in Denver.

Most recently, we have begun discussions with the Information Technology Division and the School of Extended Studies to provide connections to the university's e-mail system for off-campus student and faculty transmission of ILL requests and to develop the mechanisms whereby students can communicate with on-campus professors and other campus service areas, including the Libraries. Remote access to our cd-rom databases will be another challenge we face in the near future.

Cooperation at the inter-institutional level involves numerous interconnections with the State Library, community colleges and public libraries. Off-campus students frequently go to their local libraries for information sources and then widen their search by either dialing into CARL or by making a phone call using the Libraries' 800 number. We are currently investigating the installation of a gateway that would link the University of Wyoming's CARL system to the state database (WYLD) which includes all public and community college libraries, thus eliminating the two-step access and searching process.

Interrelationships and cooperation between the University and community colleges is deemed extremely important in terms of communication. Wyoming Educational Trust Funds were awarded to the University Libraries and the School of Extended Studies to install dedicated CARL terminals, printers and fax machines and compressed video technology in all community colleges and one community college branch site. The primary purpose for awarding these funds was to serve UW off-campus students in both their coursework and information needs.

Strong cooperative linkages exist between the UW Libraries and CARL. Hardware concerns and changes are frequently addressed at CARL strategic planning meetings. Database development is a shared, cooperative effort in terms of determining what databases will be mounted on the system, licensing fees, user restrictions, etc. UW's membership in the Greater Midwest Research Library Consortium encourages additional cooperation and future technological connections such as Ariel document delivery services, an on-line union serials listing, and other resource sharing initiatives.

In 1991, the UW Libraries conducted a pilot test to determine if article delivery time could be reduced by using commercial vendors to supply some or all journal article requests. The study results indicated that commercial vendors were not faster than libraries, and they were definitely more expensive. In fact, the study further revealed that commercial vendors were not the answer to solving the problem of access over ownership, with the exception of UnCover2 in which UW is a participating UnCover member. UnCover2 was the only vendor which met our expectations in terms of cost and efficiency. As a result of this study, we established a deposit account and presently rely heavily on Uncover2 for document delivery service to off-campus students.

Access over ownership is a collection development concern and an issue which ultimately impacts the Interlibrary Loan Department regardless of where a student or professor is located. Several issues must be considered with respect to access and ownership. First, how will publishers respond to serial cancellations, projects such as UnCover2, and subsequent changes to copyright and royalty fees? Second, journals must be owned by somebody in order to make the system work. Those libraries which own collections have already demonstrated they can perform better (speed and cost) than the private commercial vendors. Finally, university or governing officials think they can save money by access instead of ownership, not realizing that an institution must own the material and a fee will be assessed, at which point it must be determined if ownership is more cost effective than access. All of these concerns and subsequent actions are bound to have a tremendous impact on the information needs of off-campus library users.

Keeping this framework of the virtual library in mind, we consider where we were two years ago, what have we accomplished this past year, and what our plan is for next year and into the future. Some of our projects include: 1) adding a feature to the university's e-mail system which will enable individuals to send information requests electronically rather than by mail or telephone; 2) installing CD-ROM servers; 3) providing access to full text journal subscriptions available on CD-ROM with dial-up capabilities; 4) providing of modems to off-campus students; and 5) providing remote access to OCLC FirstSearch.

BUILDING A PARTNERSHIP

Up to this point, we have discussed the virtual library and the off-campus programs as if they developed in isolation. To some extent this is true. Despite some overlap (Johnson 1983), the sanctity of the campus library and the autonomy of the distance education unit discourages interaction between programs (Whitson, Cottam, & Van Arsdale 1991) However, changing expectations, demands, roles and responsibilities of distance educators will require that libraries continue to move in the direction of realizing the virtual library. Remote access and rapid document delivery are two components that will serve to create and/or enhance a stronger relationship between libraries and distance educators.

Technology has long been viewed as the impetus for the library "without walls," and off-campus library programs are in part the realization of that concept. Advancements in technology have in most cases been developed to respond to on-campus needs; however, the off-campus population has reaped great benefits from library automation. The virtual library is the mechanism by which the informational needs of off-campus students can be accomplished. For the most part, direct electronic access is a replacement for physical access that is not available to the off-campus community (West 1992). It is the means by which students can learn library and literacy skills at a distance and obtain the needed resources to enhance their educational experience.

Perhaps one reason the off-campus population is pushing us further toward realizing the virtual library than on-campus students is that they are more comfortable using technology. Their linkage with the instructor, program coordinator, and library has been via electronic connections such as audioconferencing, audio graphics, compressed video, etc. Because of this, they are more open to learning remote access protocols, searching information databases, using rapid document delivery services such as UnCover2, sending messages and requests via fax, or even using something as simple as the telephone to submit material requests.

Presently, UW's School of Extended Studies is considering the feasibility of purchasing modems to further promote access to the library collections for those students who have access to a PC only. This will serve two purposes. First, it will allow students to communicate with their instructors and with each other; second, it will enable them to log on to the campus computer, making it possible for them to request materials through electronic mail. Perhaps some day, in achieving the ultimate in a virtual library, we will have the capability of reading library reserve materials from a home computer.

In addition to CARL and other electronic access, the University of Wyoming Libraries have initiated other cooperative ventures with the distance education office. The libraries annually publishes a brochure which describes library outreach services. The costs of this publication are shared between the Libraries and the School of Extended Studies.

Outreach services library staff are presently participating in off-campus faculty development workshops. This entails making presentations which describe how the Libraries can and want to be an active participant in the off-campus experience as well as providing an overview of services available. With this type of joint effort already in place, library staff are now developing a process whereby they will assist faculty in course design activities when a library component seems appropriate. For example, when extensive outside reading or research is warranted, an instructor might solicit the help of a librarian in determining appropriate strategies for accessing and searching information databases, identifying materials, submitting citation requests, and obtaining documents.

For the Libraries, a compelling force behind developing such partnerships is to improve and enhance access to information for off-campus students. More importantly, however, is the desire to provide distance learners with the services, tools and resources that will help them become more independent library users. They can only achieve a high level of independence by having access to the resources and learning how to use the technology that promotes the concept of the virtual library such as networked cd-roms, access to on-line periodical indexes, increased use of LANS and WANS for communicating questions and requests, gateway access, and rapid document delivery.

THE UW MODEL FOR DISTANCE EDUCATION AND THE VIRTUAL LIBRARY

Burge (1989) wrote about the interdependence of distance education. In her study she concluded that the quality of distance education requires ongoing relationships between librarians and learners, faculty, tutors, course developers, administrators, technologists, and other librarians.

Similarly, we recognize this need for developing multiple relationships. Accordingly, we have developed our own way of thinking about this. Our model resembles a railroad track with ties, with the parallel tracks representing the interdependent development of the library and distance education. The ties between the tracks, or the connections, represent what we must do in order to achieve and maintain interdependence.

Currently at the University we are working toward specific actions, connections and relationships that will integrate the Libraries and distance education. Achieving the virtual library is one way by which the off-campus community has equal access to library services and information resources.

IMPROVED CONNECTIVITY

Both human and electronic connections are critical to distance education. Further, such connections must be compatible and complementary with the institution's infrastructure, mission, and programmatic goals and objectives.

Electronic connections play a primary role in the educational experience of off-campus library users. These connections are particularly important with respect to access, document delivery and communication (Kopp 1991). Improved connectivity also requires both a local and national perspective. For example, in some parts of Wyoming, the telephone remains the most viable form of communication available to off-campus students. Outdated telecommunication systems will not accommodate fax machines or computer modems. On the other hand we must be cognizant of where appropriate telecommunication channels exist in order to expand networks and deliver documents electronically.

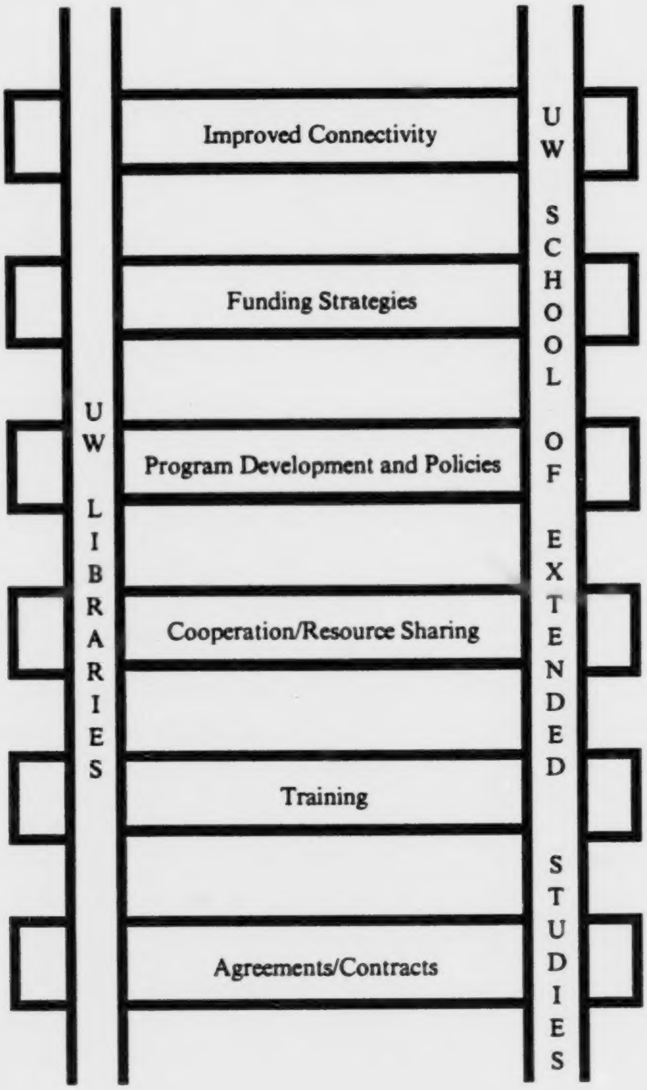
Some areas where improved technological connections will have a significant impact on distant education are:

○ Develop gateways and interconnectivity between networks.

○ Link cd-rom systems over LANS and WANS.

○ Promote technology to support end-user searching.

KEY COMPONENTS FOR INTEGRATING DISTANCE EDUCATION AND LIBRARY SERVICES


UW LIBRARIES
UW SCHOOL OF EXTENDED STUDIES
Improved Connectivity
Funding Strategies
Program Development and Policies
Cooperation/Resource Sharing
Training
Agreements/Contracts

- Facilitate internet connections with Ariel and other software packages such as Gopher, Veronica, and Archie.

FUNDING STRATEGIES

Financial restraints will continue to impact the types and quality of services, including information technology available to the off-campus community. If libraries expect to acquire additional technology, they must reassess budget applications and appropriations.

When libraries began to automate, monies were reallocated from collection development budgets or other sources to the acquisition of integrated automated library systems. This trend to reallocate resources will continue as libraries struggle to keep up with technological advancements. Authors Von Wahlde and Schiller (1993) support the idea that new funding sources are not likely to occur in the future. Reallocation of funds will be necessary. They further note, "we cannot control the economic situation in terms of sufficient resources to do everything we want to do. We can control our own budgets, we can make choices..." (33).

Alternative funding strategies for the future may include:

- Share resources between departments and units within the institution.

- Pool resources between institutions to develop networks.

- Incorporate library resources as necessary components in outreach grant applications.

- Solicit funds from distant education units for the purpose of supporting library outreach services.

- Develop fee based services in a networked environment to serve non-university affiliates.

- Solicit additional funds through grants, and private and corporate donations.

PROGRAM DEVELOPMENT AND POLICIES

Programs and policies which impact distance education and the library must be viewed from an institutional perspective. The library should be involved at all institutional level decision points when new programs impact library services, personnel and resources. Inclusion in the decision making process requires:

- Participation in institutional-level decisions relating to the organizational structure of outreach services. For example, the centralization vs. decentralization model of distance education.

- Include library staff participation at the institutional level regarding course review and program implementation. The University of Wyoming Regulations state that the library shall have representation at the time new courses are reviewed and accepted and at the initial stages of new program development.

- Participate in articulation conferences which impact outreach services, including availability of library services and resources.

- Participate in accreditation activities when appropriate.

- Promote and encourage understanding and application of guidelines and standards such as *ACRL Guidelines for Extended Campus Library Services.*

INTERRELATIONSHIPS AND RESOURCE SHARING

In response to financial restraints and limited resources, libraries are being pressured to participate in collaborative ventures and resource sharing initiatives. We have discussed the importance of developing technological partnerships and the elements of cooperation within the context of the virtual library. There are additional areas to consider:

- Develop institutional relationships with outreach program coordinators, campus computer divisions, outreach councils and faculty.

- Develop cooperation and resource sharing strategies with other libraries including public libraries, community college libraries, specialized or corporate libraries and state library.

- Develop coalitions with distant educators through participation in associations such as the Coalition for Networked Information sponsored by ARL, CAUSE, and EDUCOM, and the Western Cooperative for Educational Telecommunications.

- Promote network/system level cooperative resource sharing projects, e.g., CARL, Greater Midwest Research Library Consortium, National Network of Libraries of Medicine, etc.

TRAINING

As libraries introduce new technology, there is the obvious need for training; however, training initiatives must reach beyond personnel within the library. Slade (1991) noted that "the challenge for librarians in the years ahead will be to educate off-campus students about new technologies and provide sufficient bibliographic instruction to enable students to use the technology...to effectively locate references and information" (474). Training requires:

- Teach the mechanics of navigating between systems and filtering techniques for locating appropriate resources (Loomis & Fink 1993). This is an area which needs to be given serious consideration for providing library instruction to the off-campus population.

- Use existing technology to teach off-campus library users,i.e., compressed video, hypertext, online training manuals, videotapes, etc.

- Integrate library skills into course assignments whenever appropriate.

AGREEMENTS/PERFORMANCE CONTRACTS

Although contractual arrangements vary from institution to institution, two underlying reasons exist for establishing such agreements. They are: 1) the home institution assumes responsibility for acquiring and providing services to the off-campus population, and 2) quality control and accountability mechanisms exist for both the home institution and the contracting library. We have identified three types of contracts or agreements that seem to have emerged as home institutions and libraries build relationships with local libraries. They are:

- ○ Contractual arrangements. Scrimgeour and Potter (1991) discuss the value and process for developing written agreements between libraries. This is perhaps the most common approach which allows for delivery of library services by another library to off-campus students.

- ○ Cooperative Agreements. The University of Wyoming has chosen to establish cooperative agreements with the community colleges throughout the state which specify the level of all services, including library services provided to the student by the home institution. For example, the section addressing library services specifically outlines that the UW Libraries will provide library reference and research services, develop and deliver information access training, and strengthen cooperative collection/resource sharing activities. Further, emphasis will be placed on access to information rather than on-site collection of materials. By capitalizing on the use of the UW CARL on-line catalog, telefacsimile equipment, CD-ROM technology and other electronic database access, as well as any other emerging technologies, information resources can be enhanced and document delivery improved.

- ○ Performance contracts. Until recently, the UW Library Outreach Services Office maintained an off-site branch library in Casper. Because of duplication of services and staffing requirements, the branch library was merged with the local community college library. The contract with the community college 1) delegates all off-site fiscal management and supervisory responsibilities to the community college library director, and 2) establishes a performance evaluation process to assess and monitor the adequacy and quality of library services. This process provides the Libraries with built-in evaluation methods to determine the quality of library services.

CONCLUSION

As Burge (1989) noted, "Models and mechanisms are one thing, reality is another. We believe in the entrepreneurial potential and willingness to learn of library staff and we acknowledge the goals of education for greater student satisfaction and success in distance courses. But neither will become reality until librarians and educators become more interactive and more interdependent in their own roles and relationships" (12).

Similarly, we believe our model of the connecting railroad ties symbolizes the connecting linkages that address and promote the educational and information needs of the off-campus population. There are four scenarios we can choose to guide us as we face the future. First, librarians can be **inactive** by avoiding the future and "doing their own thing" from day-to-day. Second, librarians can be **reactive** only when forced. Third, a mandate librarians frequently hear is that they need to be **proactive**.

This approach involves moving full speed ahead with planning, predicting the future, and utilizing technology to its fullest capabilities. Finally, the fourth scenario is the **interactive** approach which requires working with program coordinators, departments, institutions, organizations and agencies.

The interactive approach presupposes that the library and distance educators will concentrate on developing programs which will enhance coordination and interdependence between the two entities. Thus, we have articulated our goals and established our objectives. Our actions will determine our future.

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Faculty Perceptions of Off-Campus Student Library Needs

Gloria Lebowitz
University of Northern Colorado

In 1985, the State of Colorado passed House Bill No. 1187 which, in addition to establishing assessment testing, reorganized higher education in Colorado by assigning to the Colorado Commission on Higher Education (CCHE) the role of overseeing all state-supported institutions of higher education. This included determining the role and mission of each state-supported institution of higher education, establishing enrollment policies and admission standards, and determining and approving any new programs which were to be offered by the institutions. The purpose of the last was to "eliminate needless duplication of facilities and programs in state-supported institutions".[1] In an attempt to reduce competition among state institutions for the same students, CCHE also designated that specific institutions be responsible for providing mastery in particular programs. Ultimately, what this meant was that the delivery of higher education was being reformulated, with the graduate programs being condensed into fewer institutions.

It was at this time that the University of Northern Colorado was given the statutory designation of

> primary institution for undergraduate and graduate teacher education in the state of Colorado ... and the responsibility to provide on a statewide basis, utilizing where possible and appropriate the faculty and facilities of other educational institutions, those graduate level programs needed by professional educators and education administrators.[2]

Adams State College, as a rural institution with relatively easy access to much of the southern part of the state, retained degree authority for certain graduate level degrees in the field of education, and Colorado State University retained the exclusive responsibility for vocational teacher education. Other campuses within the state were designated as access sites.

Although UNC had been involved in the delivery of off-campus education both in and out-of-state since 1907, in 1985 they were only delivering in-state programs. With the passage of 1187, the university commitment to off-campus education changed emphasis. The mandate made no reference to the provision of any support services, such as library services, but did emphasize that the education was to be equal or comparable to that taught on-campus. Clearly, if the education available to off-campus students was to be equivalent to that of on-campus students, there would have to be library services for off-campus students.

And so, beginning in 1988, the Director of Michener Library and the Dean of Continuing Education began discussions about creating a new position within the Library to serve the information needs of off-campus students. In 1990 agreement was reached and paperwork finalized--the College of Continuing Education would pay the salary for the library position, the Library would support other expenses. The position was advertised and approximately a year later, I became the first librarian in UNC's Off-Campus Programs Department.

PROGRAM START-UP

It was my responsibility, as the first Off-Campus Programs Librarian, to develop a department through which students enrolled in UNC's off-campus graduate degree programs could have access to the materials and services of UNC's James A. Michener Library. This was a new venture not only for UNC but for state-supported institutions in the state of Colorado.

Although Colorado can point to a history of cooperation among libraries and librarians, as evidenced by the development of CARL, a cooperative online system of library catalogs and databases initially established in 1978 by the Colorado Alliance of Research Libraries, there was no precedent for any state-supported institutions[3] providing library services to off-campus students nor was there any detailed written information about the resources of site libraries. Therefore, in developing the program at UNC, I had to start from ground zero not only in assessing the specific library collections available at or near UNC teaching sites throughout the state but also in conducting needs assessments of faculty and students involved in UNC's off-campus programs.

I began the assessment process by familiarizing myself with the libraries within UNC's instructional site areas. I met with the library directors of both public and academic library directors to discuss plans for UNC's Off-Campus Library Programs Department and the interactions of those libraries with UNC staff and students. Although many of the libraries which I visited are CARL libraries, either through a direct connection, dial-in access or through the western slope's[4] consortium, MARMOT, there were many resources and impressions which I could only assess via an in-person visit. This information, together with that gleaned from handouts prepared by the libraries, was organized into guides to the resources of the local libraries.

PLANNING THE SURVEY

In November 1991, in order to learn more about the climate at UNC with regard to faculty teaching off-campus classes, I developed a survey to be distributed to those who had taught off-campus (the "Off-Campus Programs Library Survey").The purpose of the survey was 1) to gain an understanding of and to assess the needs of faculty teaching off-campus, and 2) to provide faculty with the opportunity to have input into the design of the library services being developed for the off-campus community. I planned to gather data about the information needs of faculty teaching off-campus, to analyze that data, and then to develop a plan of service for the off-campus user. Most questions concerned faculty perceptions about the availability of and need for library resources in the off-campus environment, but there were also questions about the types of services which faculty might want prior to or during their off-campus courses.

The survey was distributed to all those who had taught in the College of Continuing Education's off-campus degree-granting programs during the previous two years (1989-90 & 1990-91). This involved 120 faculty, of whom 77 were campus faculty and 43 were adjunct.

Forty-two surveys (35% of the total) were completed and returned. A review of these showed that campus faculty were more responsive than adjuncts: 33 returns were from campus faculty, 9 from adjuncts. Because the number of responses from the campus-based group was larger and therefore might give a more accurate sense of faculty attitudes and perceptions regarding off-campus education, only these responses will be examined.

SURVEY RESULTS

The questionnaire as distributed with its accompanying letter appears in the appendix. A condensed version for discussion purposes appears below. Although there were 33 responses, all questions were not answered 100% of the time.

The survey began with a two part question

1. **Do you differentiate between**
   a. **assignments given to on- and off-campus classes**
   b. **course outlines used for on- and off-campus classes**

The purpose of this question was to develop a basic understanding of how faculty treat off-campus courses in terms of the requirements and/or expectations asked of students, as shown by the assignments and/or course outlines used. Approximately equal numbers reported that they give similar assignments on- and off-campus although they are more likely to use different course outlines.

	Yes	No	No Answer (N=32)
different assignments	47%	53%	0%
different course outlines	34%	59%	6%

Given the difference in class format (usually three alternating weekends vs the traditional fifteen week format) and the corresponding intensity of the courses, it would seem that there would be a more noticeable difference in either the course outline used or in the assignments given. That difference, however, may occur more in the methodology of teaching than in the course content. One respondent confirmed this conjecture by commenting that "differentiation occurs due to time constraints associated with off-campus and library resources available."

Does this non-distinction have implications for the student or for the librarian serving that student? It would seem that there would be some. These distinctions, however, might be as simple as

- Recognition by students that they need to "get their act together" faster so that there is time to request non-locally available materials from the campus library

- O Recognition by the librarian serving off-campus programs that mechanisms need to be developed whereby students can access and receive needed materials expediently

- O Recognition and acknowledgement by faculty that they need to work closely with librarians to ensure that assignments and expectations for research are doable within the constraints of the time frame.

These are rather common and significant problems in off-campus programs since students at off-campus sites do not usually have access to the same resources as do on-campus students.

QUESTION #2: What types of library services do you consider it necessary for students to have available?

There were ten specific choices plus an "other" option for people to select in answering this question. There were 190 responses from the 33 faculty, indicating that each person had responded an average of 5.75 times. The responses were as follows:

	PERCENT	(N=33)
Access to journal/mag articles	90.90	
Access to periodical indexes	81.82	
Access to any academic book collection	81.82	
Interlibrary loan	78.79	
Access to materials on microform	57.58	
Specific access to the UNC collection	45.45	
Access to reference assistance & guidance	33.33	
Access to government documents	33.33	
Instruction on use of libs & lib resources	30.30	
Reserve collections	27.27	
Other services/resources	15.15	

What is most interesting to note about the above is that although most faculty think it is necessary for students to have access to journal and magazine articles (90.90%), not as many (81.82%) think it necessary for them to have access to indexes. Since periodical citations (and articles) are most efficiently located through the use of indexes, this raises the question of how the faculty would wish students to gain access to the citations.

Also of interest is that faculty give a low priority to two integral aspects of library service which are available to on-campus students: Only 33.33% consider reference assistance and guidance necessary, and only 30.3% think it necessary to have instruction on how to use libraries and library resources.

The 15.15% faculty who indicated that other services/materials were needed cited the following: access to tests and assessment materials, access to curriculum materials, and access to children's and young adult public library collections.

QUESTION #3: Have you noticed the lack of any of the resources cited in question #2) in your teaching experiences off-campus?

Most of the faculty members indicated that they had noticed a lack of services and/or materials in the off-campus locations.

QUESTION #4: Do you expect students to refer to resources other than the textbook and/or their own experiences in order to be successful in your class? If yes, which of the following do you expect them to use?

Thirty-two (96.97%) of the faculty responded to the first part of this question by indicating that they do expect students to use other resources than textbook and experiential knowledge. To answer the second part of the question, they were to check off as many as appropriate of ten items, including the option of "other". The resources were checked 123 times, an average of 3.84 per respondent.

Only direct source items were listed as choices, thus directional aids such as indexes, abstracts, and catalogs were omitted. As expected, the most frequently selected type of resource was that of journal/research articles, selected by thirty (93.75%) of the thirty-two respondents. In the "other" option, selected four times, faculty cited: school district and Colorado Department of Education documents and statutory materials, testing materials and reviews, course handouts, and access to an OCLC terminal and to an on-line cataloging and circulation system.

The results, in order of selection, were

ITEM	PERCENT (N=32)
journal/research articles	93.75
books	75.00
ERIC Documents	53.12
textbooks	50.00
magazine/general articles	43.75
curriculum materials	31.25
government documents	25.00
other	12.50

QUESTION #5: Do you commonly give assignments which require the use of the above? If yes, which?

Again, respondents were asked to make selections from a list of resources. Twenty-nine of the 33 respondents indicated that they do give assignments requiring use of specific resources. Two of the four who do not give assignments noted that it was because the resources were not available.

Twenty-one of the faculty specified which resources they expected students to use in completing assignments. These were, in order of selection,

ITEM	PERCENT (N=21)
journal/research articles	80.95
books	66.67
ERIC documents	47.62
magazine/general articles	42.86
textbooks	38.10
curriculum materials	23.81
government documents	9.52
other	9.52

Despite the variance in the number of respondents to questions 4 and 5, there is minimal difference in the responses. Fewer people answered the second part of question 5 but the result was but a slight inversion in the order for the usage of textbooks vs. magazine/general articles.

#6: What types of assignments do you routinely give?

This question also dealt with the type of assignments given by faculty. One person did not respond to this question, which lists seven types of possible assignments, plus the "other" option. There were 114 responses,indicating that each respondent selected an average of 3.56 assignment types.

TYPE OF ASSIGNMENT	PERCENT (N=32)
b. summary of related journal article	71.88
g. oral presentation	71.88
d. "term" paper	62.50
a. book review	40.63
h. other	31.25
c. annotated bibliography	28.13
e. strategic planning exercise	25.00
f. lesson plan	25.00

QUESTION #7: How would you compare the library knowledge of off-campus students to on-campus students?

Thirty faculty responded to this question, with several selecting more than one answer. Twenty-six percent saw no noticeable difference between the groups, although one respondent commented that the major difference was in attitude. Fifty-six percent of the respondents felt that off-campus students seem to have knowledge of library materials; however, materials are not available (choice d). Forty-three thought off-campus students have less awareness of library materials (choice c), and specifically seem to have less awareness of key reference materials and indexes and how to use them. Several respondents selected both answers c and d, perhaps reflecting their own ambivalence about the knowledge base of students regarding library materials or perhaps selecting choice d because it is the only one which makes reference to materials not being available.

Only one respondent (3.33%) thought off-campus students had more awareness of library materials while two others (6.66%) found it a difficult assessment to make since the use of library materials is not required.

	PERCENT (N=13)	PERCENT (N=30)
a. no noticeable difference between groups		26.66
b. off-campus students have more awareness of library materials		3.33
c. off-campus students have less awareness of library materials		43.33
1) no apparent knowledge of indexes and/or how to use them	61.53	
2) lack of knowledge about key reference books and authors	69.23	
d. off-campus students seem to have knowledge of library materials; however, materials are not available		56.66
e. difficult to answer since the use of library resources is not required		6.66
f. no experience yet in teaching off-campus classes		0.00
no answer		1.0

QUESTION #8: What library services would you find helpful when teaching off-campus?

Thirty-one of the faculty answered this question with 82 answers. In order of response, faculty saw their greatest needs as follows:

	PERCENT (N=31)
a. information about site libraries and local resources	87.09
b. descriptive materials/handouts about various library resources available	77.41
d. assistance in setting up on-site reserve collection	41.93
f. reference of a routine nature as it relates to off-campus	29.03
e. assistance in preparing library oriented assignments	19.35
c. assignment oriented library instruction	12.90

QUESTION #9: Please list any of the specialized materials you think students should have direct access to at the local site.

Since the majority of the degree-granting programs are in education, it follows that many of those who responded with specific requests listed items such as CIJE, ERIC (particularly on CD-ROM), *Buros Mental Measurements Yearbooks*, standardized tests, and speech communication journals and indexes as well as "educational journals". Others responded with more generic requests such as CARL, interlibrary loan, indexes, photocopying, government publications, professional magazines, books, and "quick access to journals". One suggested copies of all required and/or recommended texts for classes, a policy which UNC does not adhere to even on campus. Only 14 faculty (42.42%) responded to this question.

Faculty comment/Open-ended question: Comment on how the library could best serve your needs and the needs of the off-campus students

In response to this request, most faculty indicated that their greatest need was for information about the site libraries and their resources in advance of class meetings. Several also mentioned their need for access to materials and borrowing privileges at local libraries. And, whereas one faculty member commented on not wanting to be a "packhorse" and so suggested provided updated materials for off-campus sites, another requested that the library make materials (i.e., journals and books) available for him/her to take to the off-campus site. Yet another suggested "a library van which carries information from site to site". Seventeen (51.51%) responded to this section.

CONCLUSION

The survey was conducted in November 1991, as an assessment tool for discovering the types of needs which faculty had or thought off-campus students had and which, therefore, the Off-Campus Programs Department should address. The survey indicated that **faculty saw a need for specific materials and/or access to materials at instructional sites.** Prior to the start-up of the Off-Campus Programs Department, several faculty members offered self-contained classes and not only distributed copied articles but carried books and journals to class. Faculty were not aware of the materials available to students locally. By examining the resources of the local site libraries, I found that basic reference resources were available at most sites although specific journals were not. Most of the needed journals are, however, available at UNC which students can access through CARL or MARMOT. In fact, through CARL or MARMOT (and soon through ACLIN[1]) off-campus students can **access** not only the UNC collection but collections of libraries located closer to them. And since 1992, students have been able not only to request reference assistance but also to request materials not available locally through UNC's Off-Campus Programs Department. Knowing that off-campus students can have access to the same book and journal materials as on-campus students may, therefore, cause a change in the way in which faculty teach in the off-campus programs.

Responses to the survey also indicated that **most faculty judge the library skills of off-campus students to be equal to those of the on-campus students** but mention that off-campus students do not have access to the needed materials. Although the former may be true, a major problem for off-campus students has been the lack of direct access to the materials. Additionally, many students have not known how to manipulate the online system to access materials from their own or other libraries. This, of course, is frustrating to both student and faculty and may cause faculty who teach off-campus to eliminate some of the research components of the coursework. Developing the mechanism by which students can request materials directly from UNC rather than through a local site library's interlibrary loan office has facilitated the use of UNC's resources. Certainly, then, a responsibility of the off-campus programs librarian is to develop on-going communications and bridges with faculty to inform them of the nature of the off-campus programs service and the commitment to providing materials to support off-campus classes.

In follow-up conversation with faculty, it has also been discovered that **although faculty recognize that library usage and research (or information-gathering) is a necessary element of graduate study, they tend to forget that the methodologies and strategies with which they are so comfortable often have to be taught.** Therefore, it is important for the off-campus librarian to conduct instructional sessions and develop materials showing students how to access available indexes. Most returning students, even those on the graduate level or those who have not used an academic library recently, need some instruction on the most efficient ways to gather research information. Since many of the students attend classes in areas where the academic libraries have access to CARL/MARMOT, UNCOVER, and ERIC as well as print indexes but not the supportive journals, students do seem to benefit from sessions in which they are shown effective and efficient methods for selecting materials. As faculty become more conversant with the library instruction element of the Off-Campus Programs Department, they become more willing to give up class time for that instruction ... they see that there is a difference in the depth of information which students are able to gather and, too, in the level of frustration experienced by the beginning researcher. Sessions of this sort not only increase the knowledge level of the students and their comfort level in libraries but contribute toward the goal of building life-long learners.

The Off-Campus Programs Department at UNC, as a result of surveys of faculty and students as well as assessments of local library resources, does provide the following elements of service to its population: 1) library use instruction, 2) reference and referral assistance and guidance, and 3) document delivery. These services have been well-met.

NOTES

1. Denver, CO., "Higher Education and Vocational Training" Act, HB 1187 *Session Laws* (1985) Chapter 176, Section 1, 23-1-101.

2. Denver, CO., "Higher Education and Vocational Training" Act, HB 1187 *Session Laws* (1985) Chapter 176, Section 7, 23-40-101.

3. Reigis College, a private Jesuit school located in Denver, began services to its off-campus students in 1990.

4. Because the mountains and geographics play such an important role in Colorado, they define much of the way in which people speak about the state and its services. Locations west of the Continental Divide are said to be on the western slope; those in the east, particularly in and around the foothills area are referred to as being in the front range or foothills; those farther east might be in the high plains or eastern plains area, etc.

5. ACLIN (Access Colorado Library and Information Network) is a cooperative project of the Colorado library community developed to provide access to libraries of the state for the residents of Colorado. Availability to the public is scheduled for September 1993.

University Libraries
Administrative Services

University of
Northern Colorado

Greeley, Colorado 80639
(303) 351-2601

To: Faculty
From: Gloria Lebowitz, Off Campus Programs Librarian
Date: October 28, 1991

As you may have heard, I have been hired to develop and coordinate library services for off-campus students. I understand that you are one who has or will be teaching at an off-campus location. I am wondering if there is any specific way in which I can help you or if there are any gaps that you have discovered while teaching off-campus. I would appreciate your sharing this information with me so that I can try to ensure that your needs are met in the future.

Currently, I am in a data-gathering stage (visiting site libraries, examining resources, developing mechanisms within Michener Library by which to provide needed services to off-campus students) but I hope to have a library program for students available, on a small scale, by mid to late April 1992. Prior to that time, I would be very happy to work with you to develop assignments for your off-campus classes.

So that I can learn more about your needs as well as about the UNC off-campus students, I have developed a questionnaire which I encourage you to complete and return to me by November 22, 1991. Should you have any questions or suggestions, please feel comfortable calling me at ext 1525 or visiting me in Michener 116.

Thank you for your cooperation. I look forward to hearing from and working with you.

Off Campus Programs Library Survey

In an attempt to develop library services for the off-campus community, I am currently gathering information regarding the needs of faculty as they relate to off-caampus teaching assignments. I would appreciate your response on the following:

1. Do you differentiate between:

	Yes	No
a) assignments given to on- and off- campus classes	___	___
b) course outline used for on- and off-campus classes	___	___
c) other (Please explain): ______________________	___	___

2. What types of library services do you consider it necessary for students to have available? (Check those which apply)

___ a) access to any academic book collection
___ b) access to UNC collection
___ c) access to periodical indexes (in any form, print or CD-Rom)
___ d) access to journal/magazine articles
___ e) instruction on how to use libraries and library resources
___ f) reference assistance and guidance
___ g) opportunity to borrow materials from other institutions (interlibrary loan)
___ h) access to government documents
___ i) access to materials on microform (i.e., ERIC, back-issues)
___ j) reserve collections
___ k) other (please list): ______________________

3. Have you noticed the lack of any of the above in your teaching experiences off-campus? (If yes, please list by letter and add in, as appropriate.)

___ Yes, ______________________________

___ No, students are not required to use outside resources.

4. Do you expect students to refer to resources other than the textbook and/or their own experiences in order to be successful in your class?

___ Yes ___ No

If you answered yes, which of the following do you expect them to use?

___ a) journal/research articles
___ b) magazine/general articles
___ c) government documents
___ d) ERIC Document
___ e) books
___ f) textbooks
___ g) curriculum materials
___ h) other (please explain) ______________________

5. Do you commonly give assignments which require the use of the above? (If yes, which? List by letter.)

___ Yes ___ No

____

6. What types of assignments do you routinely give? Check as many as apply.

___ a) book review (comparative or otherwise)
___ b) summary of related journal article
___ c) annotated bibliography
___ d) "term" paper
___ e) strategic planning exercise
___ f) lesson plan
___ g) oral presentation
___ h) other ______________

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7. How would you compare the library knowledge of off-campus students to on-campus students? (Please try to consider the off-campus students as a group rather than on an individual basis).

____ a) there is no noticeable difference between the groups
____ b) off-campus students have more awareness of library materials
____ c) off-campus students have less awareness of library materials
    ____ 1) no apparent knowledge of indexes and/or how to use them
    ____ 2) lack of knowledge about key reference books and authors
____ d) off-campus students seem to have knowledge of library materials; however, materials are not available
____ e) difficult to answer since the use of library resources is not required
____ f) no experience yet in teaching off-campus classes

COMMENTS: ____

8. What library services would you find helpful when teaching off-campus?
____ a) information about site libraries and the resources available to students locally
____ b) descriptive materials/handouts about the various library resources available
____ c) assignment oriented library instruction about appropriate library resources
____ d) assistance in setting up an on-site reserve collection
____ e) assistance in preparing library oriented assignments
____ f) reference of a routine nature as it relates to the off-campus site
____ g) other ____________________

9. Please list any of the specialized materials you think students should have direct access to at the local site.

____
____
____
____

Please comment on how the library can best serve your needs and the needs of the off-campus students:

____
____
____
____
____
____

Please staple closed return to Gloria Lebowitz, Michener 116 by November 22, 1991.

Thank you for your time and cooperation.

Return To:
Gloria Lebowitz
Michener Library
Campus Mail

The New Zealand Experience: Developing a Library Service to Distance Students in a Climate of Total Change.

Sandra Mann
The Open Polytechnic of New Zealand

INTRODUCTION

New Zealand has a population of only three million people spread over approximately 270,500 square kilometres, which makes it similar in size to Japan or the British Isles, but certainly very underpopulated in comparison. We are an island nation. There are three main islands and the terrain is largely mountainous. For our area we have a very lengthy coastline; the widest area between the Pacific Ocean and the Tasman Sea never exceeds 450 kilometres.

Until the nineteen eighties, New Zealand had a large, and highly centralised public sector. We were very dependent on central Government funding and administration. Goods and services were heavily subsidised so that true costs and accountability were grey areas. Our national debt and the strengthening of the European Economic Community were threatening our economic viability which relied heavily on agricultural export. New Zealand used to be a place where well paid, low-skilled jobs were plentiful and so participation rates in tertiary education were correspondingly low.

Historically there have been three distance education providers in New Zealand, each serving their own distinct sector. The Correspondence School, based in Wellington has covered the primary and secondary school sector since 1922. Massey University, based in Palmerston North has offered degree courses in distance mode since the nineteen sixties, and The New Zealand Technical Correspondence Institute (renamed The Open Polytechnic of New Zealand in 1990), also based in the Wellington region, was the sole provider of distance technical and vocational training, up to, but not including degree level teaching.

In the past, distance education in New Zealand has tended to be seen as a second-best option, suitable only for students in remote locations. One of the major attitude changes that has come out of the recent dramatic New Zealand Government education policy is that which has placed distance education and open learning methodology to the forefront in our thinking and consequently led to an explosion in distance education provision to the extent where three of our seven universities now offer distance education courses, including a Postgraduate Library and Information Science Diploma offered by Victoria University of Wellington. There are twenty five polytechnic institutions in New

Zealand, of which several are now entering what has traditionally been solely our institution's market.

NEW ZEALAND PUBLIC SECTOR REFORMS

In 1984 the New Zealand Labour Government began a major restructuring exercise which has continued under the present National Government. Reforms have been driven by a commitment to reduce government expenditure as a proportion of gross domestic product. Government funding has been slashed and unwieldy Departments restructured as Ministries, responsible solely for policy advice to government. Operational responsibility has been handed over to business units which are accountable for all aspects of their business and work to annual corporate plans submitted to and approved by the appropriate Government Minister.

The Education Act 1989 and its subsequent Amendments, demonstrates the Government's intent to create an environment which acknowledges that in order to survive economically, the New Zealand worker of today may have to change career direction several times in a working life. The distinction between general and vocational learning has gone. The recognition of flexibility as a catalyst for encouraging further education and training for all has created an environment in which distance education has become a high profile concept and is closely associated in people's minds with technological advance, freedom of choice and flexibility i.e. open learning.

The Industry Training Act 1992 outlines "a framework for **industry** to take control of the development, implementation and administration of ['off the job'] industry training programmes."(Education & Training Support Agency: a guide to the Industry Training Act, 3). The New Zealand Government has given the tertiary sector a very clear message that we must work closely with industry to meet New Zealand's training needs. Our institution is now very much in the business of working with industry to address their training needs and to demonstrate the value of open learning as a vehicle in providing relevant and efficient training.

The New Zealand Qualifications Authority was created to, for the first time, rationalise the country's approach to post-compulsory education and training to encourage learning and skills development, increase learners' choices and to incorporate relevant learning achievement into a recognised framework of qualifications. This has meant an ongoing commitment to redesigning and rewriting courses.

In today's competitive labour market, student numbers have increased and state-funded education has become a political issue. Each educational institution now bids for funding, sets its own fees, may develop entrepreneurial activities, and decides how best to spend its income. If our "business" is not viable, we cease to exist. Pre 1989, our institution was predominantly Government funded. In 1992 83.6% of our funding came from Government and we can expect continued cuts.

The new Education Act also meant that for the first time the Polytechnic sector could be accredited to teach degree courses, previously the domain of universities. While this alone is a fundamental change in focus and has proved a real challenge for the polytechnic sector, the most profound change was that our very right to exist as an institution was challenged.

The Open Polytechnic was particularly vulnerable. We had been funded for forty five years to teach courses that were not viable because of very low enrolment numbers in any one geographical area. Further, under the old Department of Education we had protected status as sole vocational distance education providers. Now we would have to survive on the same market based funding formula as other educational establishments.

Some idea of the magnitude of the change may be gleaned from the fact that, in 1989 our institution's budget was approximately two million dollars, most of which was spent on paper and postage. (Salaries and property costs were controlled by the Department of Education.) None of our Heads of Department had budgets, yet from 1 January 1990 we had to be capable of managing a thirty million dollar budget and operate as a business. There were no central management systems in place, certainly not computerised ones - not even for enrolment. Although we served larger numbers of students than any other polytechnic, we did not have a high public profile or image at a national level which would support us in a competitive environment.

The appointment of Shona Butterfield as our institution's new Principal in 1989, and the change in status of all Polytechnics in 1990, signalled the beginning of a new era. The Open Polytechnic of New Zealand in 1993 is a very different place compared with the New Zealand Technical Correspondence Institute of 1989.

The name change is indicative of the major turnaround that has been achieved. The successful branding campaign which began in August 1992, centred on television advertising, has heightened our national profile dramatically. Independent market research figures indicate a 52% increase in public awareness since July 1992.

We now have a full academic structure in place, a Management Team providing centralised direction and three faculties. The emphasis, reflecting current market trends, has shifted from the trade and technical areas to the Commerce area. Our emphasis on market research has been a major contribution to our development. Project Teams can provide high quality learning resources on a commercial basis. "Our organisation has moved from trying to sell what we have, to providing what clients want." (The Open Polytechnic of New Zealand 1992, 6).

Teaching staff are no longer wholly or even partially responsible for course writing. Project Managers are assigned to each approved course development and Faculty staff may or may not be selected for these contracts. This places some pressure on Faculty staff to be good enough to be chosen and to allay redundancy. The same principle operates in other areas of the organisation. Each section is a "customer" of others. "If staff 'customers' can find the same quality service cheaper outside, then they have the right to challenge the internal manager of that service to produce for that price". (Butterfield 1992, 6).

WHAT HAVE THESE CHANGES MEANT FOR LIBRARY SERVICE?

Pre 1991, the library operated in Special Library mode and existed to serve up to 300 tutors. The library was poorly funded, was restricted in the service it could provide, and had a maximum staff of three. Course material had traditionally been self-contained and there was no real expectation of the student to use libraries or look beyond the print-based learning material supplied on enrolment. The library was used as little more than a bookshop to provide tutors with desk copies of texts they required to teach in their subject areas.

In 1992 The Open Polytechnic was accredited to teach a Bachelor of Business Degree. The accreditation process demanded that we be seen to be providing a high standard of library service to our students, and that the degree be taught "mainly by people engaged in research". (New Zealand Qualifications Authority 1993, 30). The Management Team of The Open Polytechnic agreed that, rather than offer a library service to degree students only, a service should be offered across the board to all our students, and was in keeping with the general educational trend away from "self-sufficient course material."

The combination of degree accreditation, a desire to establish a research culture, active encouragement and expectation of staff upskilling and the setting up of Course Development teams as the method of developing new course material all had a massive impact on library resources.

As a result of a preliminary review of library service in 1991, two new appointments were made, that of Library Manager and Reference Librarian. In 1992:

- Library staff numbers were increased to nine
- The Collection Development budget more than quadrupled
- Floor space more than doubled
- Online database searching became a norm
- The library's first computerised library management system was installed.

Further, we wanted a full student service operating from January 1993...

TOPNZ STUDENT PROFILE

The Open Polytechnic of New Zealand (TOPNZ) is New Zealand's largest distance education institute. One third of all polytechnic students study through TOPNZ. More than 28,000 students enrolled in 600 courses for the 1992 academic year. 250 students enrolled for the first semester degree intake. Where possible, an open enrolment system operates whereby students can enrol at any time during the year. Secondary school students doing pre-vocational courses, prisoners, and increasingly overseas students are part of our student profile.

Students are located throughout the width and breadth of New Zealand. Around 25% live in the South Island. Major urban areas have large concentrations of students. 23% TOPNZ students are in the Auckland area or 40% in the wider Northern Region of New Zealand.

TOPNZ is particularly catering for mature students who are presently in employment and studying part-time as they work toward their first tertiary qualification. (The Open Polytechnic of New Zealand 1991).

Equity in the provision of services is one of the values TOPNZ promotes, hence the commitment to offer a student library service to all students, rather than concentrate on degree students.

TOPNZ COURSE PROFILE

Twenty six new courses were developed for 1993. These included our first eight degree subjects: an Orientation Course, Business Statistics, Communication, Law, Economics, Management Marketing, Critical Analysis and Ethics, and Accounting. An Adventure Tourism course was developed and launched as a joint venture with the Open Learning Agency, Vancouver. Another landmark was the development of a Foundation course in Maori Art.

As an institution originally set up to provide courses that were uneconomic for other providers to offer, we have always taught a huge range of subjects. This is no longer viable in the new economic climate where we find that 70% of our courses bring in less than 10% of our revenue (The Open Polytechnic of New Zealand 1992, 6). Due to the massive reduction in apprenticeship training in this country, our trades courses, once our major strength, are not as sustainable and our teaching emphasis has shifted to the Commercial field, reflecting the market trend.

STUDENT LIBRARY SERVICE

HOW THE PROJECT WAS MANAGED:

There had been an awareness from 1990 within The Open Polytechnic that provision of library service to students was becoming a necessity. This was partly due to the philosophical move away from self-sufficient course material, but there was increasing pressure on all institutions to be accountable for every aspect of their business. However the real impetus for change was the impending March 1992 degree accreditation visit, and the increasing awareness of the emphasis the accrediting body was placing on detailed documentation of financial, professional and organisational commitment to student library service.

There was real concern within TOPNZ that more time was needed to convince the Accrediting Body that The Open Polytechnic was an institution able to take on degree teaching and was not merely the old Technical Correspondence Institute with a new name. The Accreditation visit was postponed until June and further documentation was produced including the Library Manager's Position paper of 19 May 1992 which heralded the beginning of the form the library service would take.

This time was rather a watershed for TOPNZ staff, management and teaching staff in particular, and marked the beginning of the vital turnaround that distance education librarians battle for in any institution - recognition of the very real added value the library can give to study programmes and the very real costs entailed in offering a first class distance mode service. Remember too, that teaching at degree level was uncharted territory for us and that staff upskilling and research were being expected of teaching staff simultaneously in an environment in which the institutional structure was being reshaped and staff redundancies were a daily reality.

The original Library Position Paper of May listed possible models for provision of service:

- A *laissez faire* approach, which was dismissed as contrary to degree expectations, inequitable to students and unacceptable in terms of TOPNZ accountability.
- A library service based on the Massey University postal library service which had been operating for more than twenty years. This service is based on a well resourced academic library which TOPNZ did not have.
- A contractual service based on negotiated contracts with libraries, relevant in terms of geographic placement with our student numbers, collection strengths and service experience to give the same performance level they offer their own students. It had already been established through correspondence between our Library Manager and other academic libraries, that generally it was the less suitable libraries, in terms of the above criteria, who were the most enthusiastic about contractual possibilities.
- A telecommunications based service which would mean moving rapidly to enable all students access by phone, computer and fax. It was acknowledged that this kind of service would still require a substantial base stock.

While a *laissez faire* approach was totally dismissed, it was acknowledged that a combination of any of the other methods was feasible. In light of the cautious response we had had from other libraries on contractual service and the short time we had available to implement a credible library service, it seemed clear we needed to create our own service first and follow up contractual possibilities later.

By June 1992, Management Team and the Academic Board had formally accepted the policy recommended by the Library Manager. In the interests of Equal Educational Opportunity, the same level of library service would be offered to all our students. It would have perhaps been an easy option and certainly a less expensive one, to concentrate on setting up a service to degree students only; after all, that was the basis on which we were being judged by the New Zealand Qualifications Authority. It is of great credit to TOPNZ Management, that in spite of the real need to become market-orientated they have not lost sight of equal opportunity issues, and continue to operate within a context which emphasises equity.

The second major policy recommendation accepted was that TOPNZ would assume accountability for meeting the full cost of library access, regardless of the method of delivery. A full library service would be offered so that copies of all items recommended or cited in course materials would be available for loan as well as a full reference service, including subject requests. The mid-year budget review approved two new staff positions to provide library service to students and $25,000 to provide initial stock.

The next step was the actual project implementation. We effectively had six months to implement a full library service to our 28,000 students in an under-resourced library in terms of stock, staff numbers, skills base, and largely manual library management systems.

We did not have time to wait for a consultant to be found and inducted into the TOPNZ culture, so it was agreed that I would be released from Reference duties to implement the service. Working from two base documents - the Library Position paper and the Policy paper accepted in June, the Library Manager and I agreed to weekly meetings as a way of identifying steps, allocating tasks and keeping records of progress....work began!

WHAT DID WE LEARN FROM OTHERS?

Conscious that there was a wealth of experience out there I searched the literature. I discovered this Conference Proceedings Series with glee, though was severely sobered reading about expansive committees that had the luxury of several months meetings before systems needed to be implemented. For the next six months I was to lurch between a sense of calm confidence and that of a panic stricken mortal who had taken on an impossible task.

After ascertaining what the issues were for other student library services operating in "distance mode" and obtaining an overall feel for what the rest of the world was up to I moved closer to home and relied heavily on the experience of Massey University library staff, past and present, and Deakin University staff in Geelong, Australia. Deakin's Tony Cavenagh in particular, showed unerring patience over many phone calls, where every time, without fail, I would think of "just one more question" that desperately needed to be asked before I rang off.

The Massey University extramural library service user study conducted in the mid-eighties by Philippa Auger and Marianne Tremaine, became my bible during this time. It transpired that Philippa, who had been the Extramural Studies Librarian for seven years was now heading the New Zealand Correspondence School's library service and I am indebted to her for scintillating philosophical discussions and much moral support. I also visited Massey University and learnt much from the extramural library staff there on their experiences and day to day procedures.

Another key figure was Christine Crocker of whom I first became aware during my undergraduate student days when she headed the Thatcher Library at University of Queensland and I was an extramural student living in Darwin, at the "Top End" of Australia. Like thousands of other students, I look back with fond memories to the support I received from the library staff there. They were a prime support in my studies and more real to me than any of the teaching staff. I therefore made a point of looking for her name in the literature and thus discovered the *Guidelines for Library Services to External Students*, published by the Library Association of Australia in 1982. These guidelines reconfirmed that the direction we were taking was the right one and that we were aiming for excellence in the provision of service. It also proved an invaluable checklist for the project.

HOW DID OUR EXPERIENCE DIFFER?

The major advantage identified when we compared ourselves with other institutions was that we were solely a distance education provider and we did not have the complications which seem to be inevitable when resources have to be shared, or split up between the very different needs of on and off campus students. The Massey University visit was a salutory reminder of the potential added difficulties one has when an extramural service operates within the confines of another established University library department, (in this case, Circulation), and where on-campus students are a daily reality.

The balance we have to maintain at TOPNZ is that between our traditional special library mode service to teaching staff, and our new library service to students. The Teaching staff have not totally accepted the policy that precludes their using the Student Collection but allows Student Services staff to access the main collection.

While I had operated on a largely instinctive feeling against charging for any individual student library service, Massey staff demonstrated the realities of charging for parts of service. We discussed the restrictions placed on staff selection of material for subject requests, when return postage has to be borne by the student. Massey also charge for photocopies of articles. They have now developed a computerised system for tracking supply and invoicing, adding yet another task to the daily routine. At this stage we knew we only had two staff positions allocated for the provision of the new service, and it was likely that one of these positions would be used as a Systems position as we were severely lacking in this area, and the new service was going to impact heavily on acquisitions, cataloguing, circulation systems which were not working at optimum. The issue of a satisfactory staffing level remains an issue for our institution. While collection development has been well supported, staffing levels have not.

Massey staff also validated our decision to create a student specific resource collection. They had maintained such a collection for many years but non-extramural library staff had taken the decision to stop this. The recent trend at Massey has been towards more integration with on-campus services, with general library staff working on student interloans and reference requests. In our case, where we were already providing a special library service to staff which includes long term loan of key texts, it seemed wise to keep the two collections separate.

Deakin provided the model for free fax and phone access. We were able to start our service on this basis with an answerphone so that calls could be accepted one way or the other on a twenty four hour basis.

The Australian guidelines mentioned earlier were mildly edited and revised in the hope they would be taken up as the measurable standard for TOPNZ and used in any future evaluation exercises. Questions in the original document were therefore turned into statements and main guidelines expanded or made TOPNZ specific where we had set standards that were not taken for granted in the original document. The Finance Section was expanded to include a very specific checklist for budget preparation. Examples of specific standards included in our document are that "a separate sum within the library budget is allocated annually specifically for student services." This was to ensure the true cost of the service could be ascertained and a balance between our two services could be maintained.

In summary, our service was set up as a centralised free phone and fax service with an answerphone ensuring twenty four hour access. Courier delivery largely guarantees receipt of items anywhere in New Zealand within twenty four hours and TOPNZ bears all costs. The student service is run as independently as possible and a student specific collection has been created. The ongoing aim is to provide as comprehensive a service as resources will allow. At present we are limited by our technology base and staffing levels.

MARKETING

The library bought into the publicity and information being produced for the launch of our new Bachelor of Business degree. The Student Handbook includes an introduction to the library service. An orientation video was written and directed by a well known New Zealand director Tony Hiles, with an Open Polytechnic project team coordinating the effort. The library featured in this, with the emphasis on user friendly access rather than attention to detail.

As well as this I was determined, on the basis of Management's Team validation of service to all, that we should market the service heavily. There were two reasons for this. Firstly, in light of Massey University's survey which was motivated by concern that only twenty five per cent of potential users made contact with the library, I was well aware that our student body until now, worked at certificate and diploma level, and we could not necessarily assume a library habit, or an automatic expectation of library service. Massey in comparison was solely university oriented. The second reason was that an important conclusionary insight from the Massey survey stressed the importance of concentrating on excellence of service to proven users rather than dissipating resources by worrying about nonusers. We did not want to offer a tentative service or run the risk of never knowing what the real demand level was.

My strategy here was to produce a library service folder to complement the degree publicity and to further reinforce and highlight the existence of a full student library service. It was now that the close alignment I had sought with the TOPNZ Marketing Director and her staff paid off. With full support and encouragement, Marketing allowed me to liaise directly with our external Advertising Agents to produce a distinctive publicity and information resource that, while obviously belonging to the TOPNZ family of publications, could set a permanent library style, instantly recognisable as such from now on.

The folder contained enough information, including request forms, to get students started. It is pleasing to note that students have not reported any difficulty in using these forms and library staff have not felt the need to redesign yet.

Also included in this folder was a bibliography of study skills material to introduce the idea to students that the library was in the business of providing support beyond the items listed by tutors in course specific study guides. This was also a practical step I could take to set a precedent for the Student Collection to have a broader scope than those items teaching staff had specifically mentioned in course material.

LIBRARY MARKETING AND OUR RELATIONSHIP WITH STUDENT SERVICES ORGANIZATION WITHIN TOPNZ

TOPNZ recognises that student support is vital in an open learning environment. In seven other Polytechnics we have student Learning Support Centres and our first regional Open Learning Access Centre opens in Auckland this year. Library staff enjoy a positive relationship with Student Support staff who saw fit to include a library representative on their first major Regional Student Support Services Evaluation Advisory Committee which worked during the second half of 1992.

Student Services were responsible for producing the new Student Handbook and, as a joint venture we sent a copy of that, together with the Library Services Folder to every tutor as a way of being seen to be working together. As the Evaluation Committee above found, it is tutorial staff who are most averse, to the "separation" of student support from " tutorial support". (Dallas 1992, 43).

In October 1992 the library contributed its first article on the proposed library service to the student newsletter produced by our Student Services staff. My request for feedback and comments met with a modest number of responses but we did start receiving student library requests for help which we satisfied in the desire to promote the most positive attitude possible from the very beginning, even though the service proper was not starting until January 1993.

INTERNAL MARKETING: TUTORS

It is the tutorial staff who have probably suffered the most in the huge change that has transformed our organisation from a correspondence teaching institution to an open learning business. As well as seventy redundancies in 1991 and 1992, teachers have had to accept that there is a management and marketing role within each Faculty. There is still resistance to the currently highly centralised system of management. Resistance to the Student Support role being centred outside the Faculty structure has already been mentioned.

In the midst of all this change, the library has probably fared better than other parts of the institution, as tutors have been actually receiving a far higher standard of service than was ever possible before. However there is a fine line between offering a first class service and being perceived to be overstepping the mark into "their territory". There is much work still to be done to integrate library information needs into formal academic processes.

Much of my work in the latter half of 1992 involved one to one discussions with teaching staff explaining how the service would function, what information we needed from them in order to achieve our aims, and speaking to as many formally established groups within the Polytechnic as possible. The Library Manager also contributed in this process with his access to Academic Board, Management and Faculty meetings.

One of the initial difficulties I identified was the lack of consistency in the terminology used to describe bibliographic references within course material. Further, there was no clear distinction between "set texts" and "recommended reading", and certainly no agreed bibliographic style. Thus, it was the library who suggested the standard and produced a Style Manual which is now used widely throughout TOPNZ. Policy was set to establish clearly that "set text" was the consistent term used to denote an item that students were expected to buy as part of the study requirement and would not be available for loan through the library service.

Request sheets were distributed to Work Area Managers requesting student numbers and details of items cited or listed in course material. Most library staff then became involved in the bibliographical checking process, acquisition, cataloguing and processing of this material and dealing with panics like establishing that a text was now out of print. Some tension arose between Faculty managers and the library as we pressed for next year's bibliographies at a time when they were already in a particularly stressful part of the year and were unused to having library needs added to their "to do" lists. The lack of coordinated course information meant that book lists kept "emerging", and by the time the service began we were still unsure as to how comprehensive we had managed to be. This compounded the work in January when "new" staff had to contend with largely handwritten lists, which might or might not correlate to course information. An institutional database project is underway now, which will overcome this problem. To date, around 86% of library requests have been supplied from the Student Collection. It would appear that we did quite well!

One of the challenges still ahead is establishing a workable system which coordinates all student resource lists. Traditionally "text book" lists have been printed separately and students encouraged to purchase material from a book shop supplier. Ideally, if the library could coordinate the information gathering process for both "set texts" and other resource material we could control the standard and provide an excellent service to the faculties, but lack of staff resources precludes this at present.

INTERNAL MARKETING: THE COURSE DEVELOPMENT PROCESS

Changing the method in which courses were developed made it easier for the library to demonstrate how we could contribute to the whole process. Project Teams have on the whole responded positively to services offered, such as:

- Identifying external courses which could be considered as buy-ins (with or without adaption).

- Conducting comprehensive database searches based on course descriptors.

- Identifying possible teaching resources such as recent texts, case studies, journal articles, videos.

This initial contact gives library staff the opportunity to ensure ongoing dialogue to a stage where timely acquisition of staff and student library resources occurs.

The presence of dedicated Project Managers ensures a strong knowledge base is built and, once introduced to the services the library has to offer, tends to encourage new course writers to talk to library staff at an early stage. This situation relies heavily on good relationships between library staff and Project Managers rather than a formalised requirement of library involvement.

While the Project Team method facilitates library staff input, this only occurs once a course has been identified for development. There are obviously many courses that are proceeding for which the library has had little or no input. There is much work still to be done to formally integrate library services into formal academic processes.

TOPNZ RELATIONSHIP WITH THE NEW ZEALAND LIBRARY SECTOR

The new Library Manager opened up dialogue with the Public, University and Polytechnic library sectors in early 1992, to investigate the possibility of contractual agreements to provide our students with library service. At this time senior library staff (the two of us, appointed only a few months ago) were acutely aware of the near zero base in terms of academic library resources from which we were operating. The response from our external library colleagues was muted, they too were reeling from increased pressure on their resources and reduced funding - a reality across the board in the economic climate of the nineties. At the same time informal co-operation and resource sharing between New Zealand libraries was decreasing: interloan charges were a reality and strict lending-borrowing ratios were being monitored by the National Joint Standing Committee. We were also, for the first, time working in an environment in which other academic institutions were in many respects our competitors.

It is becoming increasingly clear that the new direction in Government policy is forcing libraries to clarify their roles and focus much more clearly than ever before on who their real clients are, or should be. Historically, public libraries have borne the brunt of trying to cater for community members who also happen to be students, whether they happen to be primary school students or university students. The National Library of New Zealand is moving out of the business of general level support for public libraries in terms of bulk loans and other general support services. (National Library of New Zealand 1992.) Simultaneously, The New Zealand Qualifications Authority is insisting on a high level of library service provision as part of accreditation requirements. There is a very real challenge emerging here and I am sure New Zealand Librarians will approach it proactively and positively.

In an attempt to ensure a good relationship with our public library colleagues, we contacted the (NZLIA) Auckland Public Libraries Special Interest Group, and arranged meetings to inform them of our new service, and to ensure the written messages we gave to our students were acceptable to them. The group was adamant that we should bear prime responsibility for service to our client group and did demand that we modify our messages.

We also wanted to ensure as far as possible, that our students received a positive response, no matter which library they visited. Once our student service was operating, we sent publicity flyers to all Public, Polytechnic and University libraries in New Zealand, with a covering letter introducing our service and requesting that they hand out flyers to our students which encouraged them to contact us direct. It was extremely important that we reassured the library sector that from now on we were taking prime responsibility for our students, and we did not expect them to interloan material for our students, a service which now increasingly incurs charges.

HOW WE BEGAN IN JANUARY 1993

By January I had reverted to my Reference Librarian's position and the Library Manager has maintained overall responsibility for student services. The service proper began with two librarians. Fortunately the two staff in question had been working as part of the temporary reference team in my absence, so brought with them considerable knowledge of the library and its users, which compensated in part for such low staffing levels.

As far as day to day systems were concerned, I had produced a flowchart in which I attempted to incorporate the knowledge gained from Deakin and Massey. This meant that much of the Librarians' time in this first month was spent on evolving record systems, setting up circulation procedures and modifying routines to suit actual experience. We also wanted to collect as much statistical information as possible in the first few months to validate the service and to support increased staffing levels as soon as possible.

Looking at the first four months of service, degree students are making good use of it. In the first few months, the number of items sent to degree students has equalled the number of items sent to non-degree students. There is obviously a direct correlation between the expectation of teaching staff that their students look beyond the teaching material and student library use. Other statistics include:

- A total of 583 students are registered borrowers.
- Of 250 degree students, 37.2% are registered library users.
- 45% of all requests are made by free phone
- 27% of all requests are made by free fax
- 28% of all requests are mailed to us. (This figure is high due to new requests being forwarded in library-supplied courier envelopes together with returning library items).
- In the first four months we have supplied 1,406 items, 86% of which have been supplied from the student collection. On 2 June, we issued item 2,000.

To date the only feedback we have is informal, but very positive. Marketing staff visiting regions have also passed on favourable comments. A formal evaluation process is due to begin in August and will give a more concrete picture.

THE FUTURE CHALLENGE

Response time is the major concern. In January we maintained our target of twenty four hours, but in March, 82% of requests were supplied within five days. In April, 62% were supplied within five days. Demand for the service is outstripping our ability to meet our original 24 hour response time target.

From our experience to date we have identified the need for somone to take an overseeing role. We lack a specific staff position to take this role: to continue liaison with tutors, other Open Polytechnic staff, (including Regional Support staff), other libraries and our students. Increasing dedicated staff levels is imperative for the continued success of our service.

Other challenges for the near future include selecting and implementing a more suitable computerised library management system which can interface with the institution's student records system and allow students direct access to the library catalogue.

Cost-benefit analysis will command attention this year, and the service will remain vulnerable until it becomes a formally integrated part of The Open Polytechnic's academic service structure. Much depends on the recommendations that arise from the mid-year external evaluation and how prepared Management are to follow through on this new library initiative which to date has successfully created a responsive and user-friendly service within a very short time-frame and working from a near zero resource base.

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Assessing and Enhancing Off-Campus Library Services in Western Kentucky

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Distance learning is a dynamic endeavor, which must keep pace with both its non-traditional student body and with advances in telecommunications and other technologies which ensure its future. As universities increase their distance education emphasis, libraries are faced with the challenge of offering accompanying academic support services.

Library services provided for Western Kentucky University's extended campus program in Owensboro, Kentucky give an example of how such services may be established and changed, with relatively modest budgetary commitments, in an effort to provide services comparable to those available on campus.

The focus of library services to WKU's extended campus program in Owensboro has been from its inception on inter-institutional cooperation. These services have been functioning for many years, and with ongoing efforts at evaluation and enhancement of these services, they may continue with this cooperative structure for many years to come.

BACKGROUND

The Kentucky Council of Higher Education assigned extended campus regions to state universities in 1979. At that time, Western Kentucky University became responsible for four major Extended Campus Centers: Glasgow, Fort Knox, Russellville and Owensboro. The Owensboro Extended Campus Center, located in downtown Owensboro, is 75 miles north of WKU's main campus in Bowling Green. It serves a rural region consisting of five counties which lie across the Ohio River from Indiana.

WKU had been offering courses in the Owensboro area since the early 1960s, when a few graduate engineering classes were taught to fulfill the needs of employees of the General Electric Company. To answer the growing higher education needs of local students, a consortium was formed in 1969. Members of the Owensboro Higher Education Consortium (OHEC) included Brescia College and Kentucky Wesleyan College, two private, religiously-affiliated colleges, which would offer undergraduate courses, and Western Kentucky University and Murray State University, to offer graduate courses (Report 1990).

After the three area community colleges in Owensboro, Henderson, and Madisonville were established in the mid 1980s, WKU discontinued offering undergraduate courses. Extended campus students then had the opportunity to take courses leading to baccalaureate degrees in elementary education and nursing. By the fall of 1986, thirty-three extended campus courses were taught in Owensboro, with a total enrollment of over 500 students. This total represented one-third of all WKU extended campus courses and enrollments offered at the four centers that semester.

Although Western Kentucky University libraries did not begin to offer any formal extended campus library services until the fall of 1987, informal provisions were in place for library support to students in the Owensboro region. WKU students were welcome to use the libraries of Brescia College and Kentucky Wesleyan College, both four-year institutions, and public institutions Owensboro Community College, Henderson Community College and Madisonville Community College, all within a 45 mile radius. Of course many students from the Owensboro area also took courses in Bowling Green, and therefore came to campus for classes, and stayed to use the main library, which is open late on weekday evenings, as well as on Saturday and Sunday.

Through an informal contractual agreement with Brescia and Wesleyan, WKU agreed to place and maintain a set of its COM (computer-output-microfiche) catalog of library books and serials in the library of each institution. A set of the COM catalog was also distributed to the medical library of the Owensboro-Daviess County Hospital, to serve the needs of students who were taking WKU nursing courses in Owensboro. The majority of course offerings in the region were in the disciplines of teacher education, school administration, and educational leadership. Thus it was appropriate that WKU supply a set of ERIC microfiche and indexes in at least one local library, in this case Brescia College. Brescia was most physically accessible to students taking WKU courses, as it was just a few blocks from the Owensboro High School, where most of the evening classes were taught. Kentucky Wesleyan, also nearby, limited its library services to WKU graduate students only, due to competition for resources needed by its own students.

LIBRARY SERVICES FORMALLY ESTABLISHED

In 1987, prompted by increases in off-campus student enrollments and the recognition by accreditation agencies and library associations of the need for library services to these students (American Library Association 1982), WKU's Task Force on Providing Library Services to Extended Campus Students submitted a report to the Dean of Libraries at WKU (Strickler et al 1987). This task force had studied the literature of such specialized services, especially the proceedings of Central Michigan University's Off-Campus Library conferences, which had been convening since 1982. After assessing the library service needs of faculty and students at the Glasgow, Owensboro, Fort Knox, and Russellville centers, the task force proposed a plan for providing library services to the four centers, each according to its special needs.

WKU's main library was to be the hub of extended campus library services, headed by a full time professional Extended Campus Librarian, under the supervision of the Circulation Services Supervisor. A part time (20 hours a week) clerical library assistant would also be employed at the Helm-Cravens Library on campus to fulfill document deliveries. Individualized plans were created for each of the four centers.

For Owensboro, the following were proposed and implemented:

- A part time (20 hours per week) clerical library assistant, supervised by the Extended Campus Librarian, would be employed during the same hours as the on-campus library assistant (4:00 p.m. - 9:00 p.m., Monday through Thursday) so the two could communicate as needed in handling students' requests.

- The Owensboro High School Library, under a "gentlemen's agreement" with the Owensboro Extended Campus Director, whose center office was only a block away from the high school, would remain open during the four weekday evenings while extended campus classes were held. The library would be staffed only by WKU's assistant and a person in charge of audiovisuals and building security.

- Students in Owensboro could call the main library through a toll-free number to request photocopies of journal articles to be sent to them free of charge by telefax, by courier to the Owensboro High School library, or by mail directly to their homes.

- WKU extended campus students in Owensboro could also request books from the WKU Libraries' circulating collections to be checked out in their name and either sent to the Owensboro High School for pickup, or mailed directly to their homes. They could return these books to the high school for courier delivery to the main library, or return them directly to the main library in Bowling Green by mail or in person.

When students were ambitious enough to visit the main library on campus, they were expected to make their own journal article copies on the coin-operated machines. Under the principle of equal access to library services for off- and on-campus students, this rule seemed to be fair and reasonable.

Another distinction had to be made as to eligibility for extended campus library services. Only students who were enrolled in one or more courses actually taught off the main campus could request the services. Furthermore, the requests had to be only for extended campus courses, and not for any on-campus courses the same student might have been taking as well. This requirement could at times become a subject of contention for students living outside Bowling Green.

- A fax machine was placed in the Owensboro High School library office for receipt of copies of journal articles sent from the main library.

- Several periodical index subscriptions were initiated for placement in the high school library to support extended campus student research efforts. To add to the high school library's subscription to the *Reader's Guide to Periodical Literature*, WKU purchased: *Abridged Index Medicus, Business Periodicals Index, Cumulative Index to Nursing and Allied Health Literature, Education Index, General Science Index, Humanities Index*, and *Social Sciences Index*.

- Reference assistance from the main library was also accessible via the toll-free number. Although many students prefer to do their own subject searching for bibliographic citations for papers and course assignments, the limitations of library resources available to them necessitated that this option be available.

- O Twice a week a courier would drive between the main campus library and the Owensboro High School library to pick up and deliver materials for extended campus students.

- O A microfiche reader and a copy of the WKU Libraries' monographs and serials catalog on COM was placed in the high school library to enable the students to look up materials they wished to order in conjunction with their bibliographic searching through indexes.

Additionally, pads of paper with bibliographic information cues were provided for students to write down citations while searching through indexes. This aid would enable students to have complete bibliographic information for requesting journal articles and books. Lists of periodicals available in the WKU Libraries were provided near the indexes to enable students to select articles from journals that were readily available.

The library assistant had a supply of ECLS request forms to help students with their requests for service. Most students called in their requests from home, work, or even the high school library. Students who were pressed for time simply filled out ECLS request forms at the high school library and left them there for the assistant to call the main library while the students were in class.

The Extended Campus Librarian placed a small steel magazine/pamphlet rack in the high school library to hold promotional handouts. These included an information sheet describing the Extended Campus Library Services, a list of periodical indexes held at the Owensboro High School, a promotional brochure for the Owensboro center, bookmarks with the toll-free number and library hours, and a descriptive guide "How to use the COM catalog."

The above arrangement for extended campus library services in Owensboro was certainly a workable solution which remained unchanged for five years. Students made use of all aspects of these services to complete their assignments and forward their education. The Extended Campus Librarian made every effort to keep students and faculty in Owensboro informed of these services through providing information sheets to all classes. She also made several trips to Owensboro each year to give bibliographic instruction sessions to those classes whose instructors expressed interest in such assistance. She frequently contacted the library assistant by telephone to monitor operations at the high school, and tried to visit the library there at least once each semester.

The Owensboro Extended Campus director was quite supportive of WKU Libraries' efforts, and assisted whenever he could in easing the difficulties encountered by distance. He promoted the library services, guided and helped the library assistant with any problems, and helped in recruitment and hiring of couriers and assistants. His extensive knowledge of the community gave him the advantage of many personal contacts. These were helpful whenever any little problems arose. For example, when the need for a photocopier for reserve materials became known, he did much of the work to instate such a service. Continuous attention and interaction by those who oversee extended campus library services are essential to make a cooperative venture successful.

REASSESSMENT OF OWENSBORO'S NEEDS

A number of developments occurred between the time the first library services agreement was established in Owensboro in 1987 and the spring of 1992, when a decision was made to upgrade library services to Owensboro Extended Campus students.

In January 1992, WKU's library holdings were converted to an online catalog using the NOTIS system. Since this conversion was scheduled it was decided that it was unnecessary and too expensive to update the microfiche (COM) catalog. About eighteen months had intervened since the latest microfiche catalog was produced, and those who consulted the microfiche catalog no longer had up-to-date access to WKU's collections. Access for the Owensboro Extended Campus Center to TOPCAT, WKU's online catalog, was a high priority, but it would be exorbitantly expensive to provide a direct dedicated line for the 75-mile distance between Bowling Green and Owensboro. At the time, there was no dial-up access to TOPCAT; even if there were, this would entail a costly long distance charge. In the not too distant future, lines for KECNET would be installed at WKU's Owensboro facility, providing access to Kentucky college and university online catalogs, but no installation date had been set. The problem of providing Owensboro Extended Campus students equal access to WKU library holdings remained.

Another important event in WKU's Extended Campus Library Services was the fall 1990 opening of a branch library at the Glasgow Campus, 35 miles from Bowling Green. The Glasgow Campus Library was established as a reference library with a basic reference collection of books, a few paper indexes, several CD-ROM indexes, and the Magazine Collection on microfiche, as well as three TOPCAT terminals. The library, staffed by a full-time professional librarian and several student assistants, was open 48 hours each week. In addition, the main library's Extended Campus Library Services were still available to Glasgow Campus students, as long as the students first had done some basic research at the Glasgow Campus Library. While WKU Libraries had made great strides in providing strong library service to Glasgow Campus students, the facilities in Owensboro began to look ever more outdated and insufficient in comparison.

Meanwhile, on the main campus in Bowling Green, the University Libraries had been placing an ever-growing emphasis on the acquisition and use of CD-ROM sources. In addition to the InfoTrac and ERIC workstations, the University Libraries had acquired Agricola, Computer Select, CINAHL, MLA, DAI, Newspaper Abstracts, GeoRef, PsycLit, Compact Disclosure, GPO, and numerous products provided through the federal documents depository program. Students were lined up to use these CD-ROM products which rapidly provided a wealth of sources at their fingertips. A shift in curricular emphasis to more writing assignments and research papers undoubtedly reinforced the need for these sophisticated research tools. InfoTrac, ERIC and CINAHL were also available at the Glasgow Campus Library. Clearly, with the explosion of development of CD-ROM products, there was developing a growing need to provide them to extended campus students (Power 1992). Since the preponderance of extended campus classes at Owensboro is graduate or upper-division undergraduate courses, the need for CD-ROM resources had become essential.

The Owensboro Extended Campus program had also been growing during this time. The enrollment had increased from over 500 students in 1986 to about 800 in 1992. Selected courses were being broadcast from a classroom at WKU's public television station facilities directly to Owensboro. Additionally, preparations for offering interactive TV courses were being made.

While advances in library technology were becoming more desirable for the Owensboro Extended Campus Center, it also became apparent that improvements in basic facilities and services should be investigated. Extended Campus students in Owensboro were being provided with a patchwork of library services, with a limited service point at the high school, and library materials available at scattered locations (Brescia and Kentucky Wesleyan colleges, the community colleges and the main campus library). WKU's library assistant at the high school library had increasingly been needed to assist the center's director in unlocking classrooms, delivering audiovisual equipment for class use, and in proctoring exams. This part time assistant and the custodian were the only staff in the high school building each evening, so security was also a potential problem. If WKU was to provide library service in Owensboro, a centralized facility which could house some periodicals, the ERIC microfiche collection, and at least one CD-ROM workstation seemed to be a goal to work toward. However, impending campus-wide budget restrictions would guide any movement toward attainment of that goal.

The desired improvements in extended campus library service in Owensboro were identified, then, as: 1) Access to TOPCAT; 2) CD-ROM access, at least to InfoTrac and ERIC; 3) Improved access and service, such as weekend hours; 4) a facility large enough to hold a few basic research sources. The Owensboro High School library, although convenient to extended campus classes and offices, was too small to provide these desired services. Other area sites needed to be investigated.

Brescia College and Kentucky Wesleyan College have good library facilities which WKU students had been allowed to use, but with budget problems widespread among institutions of higher education, such an agreement might eventually be considered to infringe upon service to their own students. Therefore, it was decided to investigate local publicly-funded institutions first.

THE OWENSBORO COMMUNITY COLLEGE ALTERNATIVE

Owensboro Community College seemed to be a good alternative site to propose for WKU Extended Campus Library Services. The OCC Learning Resources Center is located in an attractive new college campus on the outskirts of town. It has a policy of open access to the community, including WKU students.

With a staff of two librarians and five assistants, the OCC-LRC is open 60 hours per week during the semester, including evening hours until 8:00 p.m. and Saturday 9:00 a.m. - 1:00 p.m. InfoTrac Expanded Academic Index and ERIC on CD-ROM are available along with printed indexes, including *New York Times Index*. Online reference searches are available through BRS. Photocopiers, microfiche reader/printers, and audio-visual equipment are also on hand for student use. The well-lit, comfortably furnished environment is enhanced by a friendly staff, making the Learning Resources Center conducive to research and study.

In addition, OCC-LRC already has access to KECNET, through which WKU Libraries' online catalog would soon be available. The facilities, staffing, hours, and resources at OCC are much more in line with what we sought to offer our extended campus students.

Before contacting the director of Owensboro Community College Learning Resources Center, we defined what WKU Libraries could offer in a cooperative effort. The most valuable asset we had was the part time assistant. In times of budget restrictions such as these, staff is likely to be the first area cut, and almost always the last item to add to library budgets. The extra workload brought by WKU extended campus students should be offset reasonably well by this additional assistant. A few additional journal subscriptions and perhaps a small fund for equipment would be other possible we could offer. Once we had determined our needs and assets, we contacted OCC's Director of Library Services, briefly describing our proposal and requesting to meet with her.

ARRANGEMENT OF THE AGREEMENT

After initial contact with the Director of Library Services at the Owensboro Community College, the WKU Dean of University Libraries, Library Public Services Department Head, Circulation Services Supervisor and Extended Campus Librarian visited the LRC to discuss proposed cooperation between the two libraries and to take a tour of the facilities. After a thorough discussion, it was decided unanimously to proceed full speed with the design and implementation of an agreement.

To prevent legal entanglements, the contract was called a "Memorandum of Understanding Between Western Kentucky University Libraries and the Owensboro Community College Learning Resources Center." (See Appendix) The agreement, modeled in part after the successful contract between the University of South Alabama and the Fairhope Public Library (Bush and Damico 1988), details the services and facilities each party is to offer. It also provides for an annual review of the agreement.

Speed was necessary to move materials and equipment out of the Owensboro High School Library to the OCC Learning Resources Center before the beginning of WKU's fall semester on August 24, 1992. The telefax machine remained in the high school library until appropriate phone connections could be made. The incumbent part time library assistant was relocated to join the rest of the library assistant staff at the OCC-LRC service desk.

A shelf was set aside behind the circulation desk of the LRC for the use of the courier for pick-up and delivery. Faculty reserve materials are held behind the desk as well. Just as they could in the Owensboro High School Library, WKU students can drop off their WKU library books for return to the main campus by courier.

PROBLEMS ENCOUNTERED

While the contractual agreement was a success, there were a few problems encountered involving the new arrangement. First was the matter of publicity. The contract was signed about one week before the fall 1992 semester began. There was in effect no lead time to notify students and faculty of the changes in library service. There was insufficient funding to prepare a mass mailing to all WKU students in Owensboro. However, the Owensboro Extended Campus director took charge of notifying faculty and students. During his regular beginning of the semester visit to classes, he announced the changes in library services. He also posted notices at the high school and in his administrative offices, together with information sheets describing extended campus library services.

One problem we had anticipated which did not occur was the inconvenience of the community college to the location of classes, about five miles away. This does not appear to have been a major problem, since we have had no complaints. The fact that upper division and graduate students are more highly motivated may be a factor in the acceptance. Another factor may be the continuation of the toll-free telephone reference and copy service provided at the main campus library. Students inconvenienced by the location change can use this reference service to complete assigned research.
After the first year of operation at OCC, in the fall of 1993, WKU Extended Campus Library Services will conduct a survey to evaluate student satisfaction with the library service.

The most significant problem encountered in the change was with staffing. Since contract negotiations occurred during the summer, while our library assistant was employed elsewhere, she was unaware of the proposed change of venue. As soon as the agreement was reached, she was notified of the move, but, like everyone else involved, she had only one week's preparation time. While our assistant was flexible enough to make to the move, her desire for autonomy was an unanticipated problem. The quality of her strong ability to work without supervision became a liability for her; our assistant was unhappy working under close supervision sharing clerical tasks such as shelfreading with others. Accustomed to reporting to a supervisor 75 miles away, she did not respond well to the additional supervision at OCC which was necessitated by the inter- institutional agreement. She soon found another position more suitable to her needs. We were very fortunate to find another library assistant quickly. We had some reservations that working for two supervisors would be a continuing problem for anyone working in the extended campus assistant position, but these have been proven unfounded. The new assistant has worked out so well that OCC has hired him for additional hours. We learned a valuable lesson in human resources management for extended campus personnel. While such staff tend to be flexible and work well independently, problems in supervision and communication can be detrimental.

CONCLUSION

There are several ways to establish off-campus library services to students who do not have the advantage of the traditional college campus experience. One method, and undoubtedly the most costly, is to set up a branch library, complete with professional library assistance, reference materials, and extended service hours. This may be the optimum solution for a thriving off-campus center located in an area with few, if any library resources.

The Owensboro Extended Campus Center is fortunate to have several institutions of higher education, both 4-year and 2-year, in its region. Rather than duplicating services by establishing a branch library such as the one opened in Glasgow, Kentucky in 1990, WKU's efforts to provide library service to its extended campus students in Owensboro have been centered on inter-institutional cooperation. Formal agreements, in 1987 and 1992, to establish library services for WKU students within local libraries were made with the intent to provide library services as equal as possible to services available on the main campus.

Key to the success of such cooperative agreements is the willingness of agreeing parties to commit resources to the services offered. Space, time, materials, equipment, and even staff should all be considered possible assets to share. Once the agreement is settled, there should be continuous assessment and evaluation of the off-campus library services. Relationships between institutions must be nurtured to ensure good communication. Improvement in services must always take priority over merely maintaining an agreement that functions satisfactorily.

Appendix

Memorandum of Understanding Between Western Kentucky University Libraries and the Owensboro Community College Learning Resources Center

Western Kentucky University Libraries and the Owensboro Community College Learning Resources Center, in their goals to serve their patrons in the best possible manner, have made this memorandum of understanding.

The following list of rights and responsibilities of both institutions outlines the spirit of cooperation for the mutual benefit to WKU-Owensboro Extended Campus students, and users of the Owensboro Community College Resources Center, including University of Kentucky doctoral programs students.

1. WKU Libraries will instruct their extended campus students in the regulations and procedures in force at the OCC Learning Resources Center, as well as the specifics of this agreement.

2. A 20-hour per week clerical assistant will be employed by WKU to provide services at the OCC-LRC. This assistant will be available Monday to Thursday, from 4:00 to 8:00 p.m. and on Saturdays from 9:00 a.m. to 1:00 p.m. when WKU classes are in session. A one-page handout will be provided to inform WKU students about services and collections at OCC and about WKU's extended campus library service.

3. As soon as it becomes technically and financially feasible, up-to-date access to the monograph holdings of WKU Libraries will be made available through KECNET. Prior to this time WKU will supply a set of its COM-Catalog.

4. WKU Libraries Serials List on microfiche, plus a microfiche reader will be placed at the OCC-LRC.

5. In accordance with OCC regulations, WKU Extended Campus students who meet residency requirements will be eligible to borrow circulating materials from the OCC-LRC.

6. WKU will block registration for those Extended Campus students who accrue unpaid overdue fines or other obligations on borrowed OCC materials until such obligations are cleared.

7. WKU Extended Campus students will be expected to abide by all the rules and regulations of the OCC-LRC.

8. Limited space for reserve materials for WKU-Owensboro Extended Campus courses will be provided by the OCC, in a location secure, yet convenient for the WKU library assistant to dispense for the use of WKU Extended Campus students.

9. A facsimile machine and a dedicated fax/800 number telephone line will be furnished by WKU.

OCC agrees to accept faxed materials at the OCC-LRC.

10. WKU Libraries will make available up to $1,500 for the purchase of periodicals to be mutually agreed upon by WKU's Extended Campus Librarian and the Director of Library Services at OCC. WKU will provide a cabinet for microfiche storage.

11. WKU will provide regular courier service to dispatch library materials between WKU libraries and the OCC-LRC. Limited space for courier pick-up and delivery will be provided by the OCC.

12. This memorandum of understanding will be effective August 24, 1992, and will be reviewed annually.

13. Execution of this memorandum of understanding will be the responsibility of the Dean of Libraries, Western Kentucky University and the Director of Libraries, Owensboro Community College.

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Analysis of Staffing Patterns and Personnel Management Practices for Academic Library Staff at Off-Campus Locations

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INTRODUCTION

National-Louis University (NLU) is a private, independent university which offers accredited bachelor's, master's and doctoral degrees at campuses located in Evanston, Chicago, and Lombard, Illinois; several Illinois extension sites; and six academic centers outside Illinois. The University serves more than 16,500 students annually, most of whom do not have direct physical access to the main campus in Evanston.

The National-Louis University Library provides services to students, faculty, staff, and administration at all locations. These services include dial access to the online catalog and some bibliographic databases, telephone reference and database searches provided by the Evanston Campus reference staff, and librarians based at each off-campus location who provide bibliographic instruction and facilitate library access. The level of off-campus library staffing is determined primarily by the enrollment at each location. An Evanston-based Coordinator of Off-Campus Library Services supervises the library faculty at the out-of-state locations and provides for training, staff development and continuing education. This study provides a comparison of NLU's staffing patterns and personnel management practices with those of other academic institutions involved in providing extended campus library services which include library staff located at sites a distance from the main campus.

STATEMENT OF THE PROBLEM

One of the main goals of the University Library at National-Louis University is to provide high quality library services to its entire constituency. Given the assumption that a well-trained staff is the primary component in delivering the expected level of service, providing a consistent level of service to several locations presents an ongoing logistical challenge for the NLU Off-Campus Library Services Coordinator at the Evanston Campus. Six full- and part-time librarians currently staff NLU Academic Centers located from 300 miles (St. Louis) to more than 1,000 miles (Tampa) from the main campus.

The Off-Campus Library Services Coordinator was interested in knowing how other academic institutions staff their extended sites, and what methods are used for providing training, supervision, communication, and continuing education for the off-campus library staff. Another concern was whether the distance of the extended site from the main campus has an impact on these personnel management practices.

RELATED RESEARCH

Standards for off-campus library services have been prepared and published by the ACRL (Association of College and Research Libraries) of the American Library Association as the "Guidelines for Extended Campus Library Services." The 1981 guidelines were revised in 1989 and published in the April 1990 *C&RL News*. The guidelines recommend that library services equivalent to on-campus services be provided for off-campus academic programs. For this study, the definition of off-campus library services will be the same as the definition provided in the ACRL guidelines of "extended campus library services," which are "those services offered in support of academic courses and programs offered away from the main campus of the institution responsible for the academic program." (ACRL 1990, 354) The standards address staffing in a brief "Personnel" section which states that

> The library should provide professional and support personnel sufficient in number and of the quality necessary to attain the goals and objectives of the extended campus program including: 1) a librarian to plan, implement, coordinate, and evaluate library resources and services addressing the information needs of the extended campus community; . . .. (ACRL 1990, 355)

Staffing patterns are mentioned infrequently in the off-campus library literature. An annotated bibliography of 535 items covering sixty years of research about off-campus library services was compiled by Sheila Latham, Alexander Slade, and Carol Budnick (1991). Two issues found in that comprehensive bibliography to be related to library staff based at extended sites were: 1) how to train public librarians to serve academic programs; and 2) the teaching role of librarians in faculty development of professors based off-campus. Courtney and Tiller (1989) made brief mention of staffing for off-campus services.

> The success of the library's attempt to serve off-campus locations also involves financial and personnel considerations. The librarian chosen to handle off-campus services should be provided with enough flexibility to schedule visits to off-campus locations. (124)

Librarians and support staff are very important for the provision of off-campus library services.

> . . . the designation of a librarian whose only responsibility is the off-campus program and the provision of adequate support staff are basic requirements. . . . Some of the specific services which this librarian can provide are: reference and information, bibliographic instruction, preparation of specialized bibliographies, compilation and distribution of information packets, faculty orientation to available library services, public relations, marketing and advertising, and evaluation of library services. (Kascus and Aguilar 1988, 35)

Although the importance of staff was again emphasized, there was no stipulation as to where that staff is or should be located.

A Canadian survey of library services for off-campus and distance education programs conducted in 1988 asked "whether at least one librarian has full-time or part-time responsibilities for off-campus library services . . ." (Slade 1991, 467) In a 1987 survey of extended campus library services in the United States, Colleen Power included a question about "Designated librarians: How many librarians are assigned to deal with your off campus students?" (Power 1991, 203) Gloria Lebowitz and Kim Schultz compiled information on 68 institutions which was published by Central Michigan University in the *Off-Campus Library Services Directory* in 1990. They reported the "number of sites from which library services are provided" and asked for the number of professional staff, support staff, and "student hours per week." (Lebowitz and Schultz 1990, 1) The scope of these surveys did not include an assessment of whether the responding institutions actually staffed the libraries at their extended sites.

One paper was identified, however, that addressed similar questions about off-campus staffing. A program was presented by librarians from DePaul University at the Fifth Off-Campus Library Services Conference in Albuquerque, New Mexico, in 1991. They surveyed 285 institutions to determine how their off-campus libraries were staffed. They asked the number of staff based at off-campus sites, the level (professional librarian, support staff, and student workers), whether they were full-time or part-time, and how many hours per week the library was staffed. (Bean, Frazier and Kreiser 1991)

This study looks at similar information on staffing patterns, but the primary focus is on how training, supervision, communication, and continuing education are provided for the library staff located at extended sites.

METHODELOGY

SURVEY

In order to meet the information needs of the Coordinator of Off-Campus Library Services, a survey was conducted of colleges and universities in the United States which were identified as possibly offering off-campus or distance education programs. The objectives of the survey were to determine:

- ○ whether academic libraries at institutions that have extended campus programs staffed their remote sites
- ○ how training, supervision, staff development, and communication with those library staff were accomplished
- ○ whether patterns or models of staffing and support for off-campus library personnel emerged.

MAILING LIST

The mailing list was obtained from the Central Michigan University librarians who are currently conducting a survey of the same academic institutions in order to update their *Off-Campus Library Services Directory*. This list originated with the National University Continuing Education Association. The list was screened to avoid sending duplicate surveys to individual institutions.

SURVEY DESIGN

A survey instrument was designed and field tested during March 1993. Surveys were sent to 387 academic institutions on March 29. The deadline for return of the completed surveys was April 23. The survey consisted of twelve questions designed to obtain information about the following areas:

Demographics/Staffing Patterns

○ name of institution (optional)

○ name, title and phone number of person completing the survey (optional)

○ number of extended or remote sites with library services more than 50 miles from the main campus

○ the number of those off-campus locations that are staffed

○ the number of staff at each location

○ whether the staff are full-time or part-time, professionals or paraprofessionals

Personnel Management Practices

○ title of person responsible for off-campus services

○ whether this person has supervisory responsibility for extended site library staff

○ the methods used by the supervisor to communicate with off-campus library staff (e.g., newsletters, e-mail, courier, telephone, mail, telefacsimile, etc.)

○ whether a supervisor travels to the extended site and how often

○ whether distant library staff travel to the main campus and how often

○ locations of training

○ the methods used to train staff (e.g., in person at the main campus, written procedures manual, videotape, telefacsimile, at the remote site, etc.)

○ the types of continuing education available to off-campus library staff (e.g, national, state, local, main campus, etc.)

○ funding of continuing education

RESULTS

RESPONSE RATE

At least a fifty percent response rate was expected. Of the 387 surveys sent, 220 (57%) were returned within the stated time frame. Of those returned, 143 (65%) reported having no sites more than 50 miles from their main campus. Of the remaining 77 institutions 44 (20%) had one or more unstaffed sites more than 50 miles from their main campus, and 33 (15%) reported one or more staffed sites more than 50 miles from their main campus.

STAFFING PATTERNS

Staffed Locations. There were 33 institutions of the 220 that responded to the survey which met the criteria established for this survey. Those guidelines required that the responding institution: 1) have at least one extended or remote site located 50 miles or more from the main campus; and 2) provide library staff as part of the library services.

Twenty states were represented by those 33 institutions. The responses ranged from one to seven per state. Institutions located in two states, California and Florida, accounted for ten (30%) of the survey responses. Two surveys were received from institutions in each of five other states.

The 33 institutions which met the stated criteria reported a total of 310 individual locations, not all of which were staffed. The number of distant sites per institution ranged from one to 99. Fourteen (42%) of the 33 institutions reported only one site more than 50 miles from the main campus. The remaining 19 (58%) had two or more remote sites, for a total of 296. Of the 19 institutions which reported two or more remote sites, three institutions only staffed one of those multiple locations.

The majority (226 or 73%) of the 310 sites reported by the 33 institutions were not staffed. Only 84 (27%) extended sites were staffed. Staffed sites ranged from one to 18 per institution. Twenty-seven (82%) of the 33 institutions had between one and three staffed sites. Another four (12%) of the institutions reported having five staffed sites each. One of the remaining two institutions had six sites, and a state university system reported 18 staffed sites.

The staffing patterns identified from the survey results indicated that the majority of library staff at the extended or remote sites were either part-time or full-time paraprofessionals. Of the total number of staff reported by the 33 responding institutions (250), 159 (64%) were paraprofessionals. Only 36% of the library personnel were classified as professional staff.

The staffing patterns varied only slightly when considering only the 27 institutions with between one and three staffed sites. This group represented 40 (48%) of the 84 staffed sites. The predominant staffing pattern among these institutions was almost evenly split between full-time professionals (30 or 34%) and part-time paraprofessionals (32 or 36%).

Six (33%) of the 18 institutions with only one staffed site had only a single staff person. The rest have two or more staff. Ten (56%) of the 18 were staffed by two to five people. The remaining two institutions (11%) reported staffing levels greater than five.

Unstaffed Locations. The 44 survey responses from institutions with unstaffed extended or remote sites more than 50 miles from their main campus came from 26 states. Four states accounted for 13 (30%) of the survey responses, with four from North Carolina and three each from Colorado, Georgia, and Kansas. The number of sites reported ranged from one to 59 per institution.

PERSONNEL MANAGEMENT PRACTICES

Supervision. Of the 33 institutions with library staff at remote sites, 21 (64%) had a designated supervisor at the main campus who was responsible for off-campus library services and personnel.

Communication. Communication between the staff at the extended sites and their supervisors was accomplished through a variety of methods. The methods used the most were: telephone (97%); telefacsimile (78%); electronic mail and U. S. mail (61% each); and institutional courier (52%). Other methods used included: library newsletter (36%); express delivery service (18%); institutional newsletter (15%); interactive video (12%); and teleconference (9%). These responses were primarily from institutions with remote sites between 50 and 150 miles from the main campus.

Supervisor Travel. Supervisors from 22 of the 23 institutions with staffed locations between 50 and 150 miles from their main campus traveled to the remote locations an average of at least once a year. Nine (39%) visited their remote sites between two and six times per year. Six (26%) of the 23 visited more than 12 times per year.

Supervisors from 11 of the 12 institutions with staffed locations between 151 and 300 miles from their main campus traveled to the remote locations at least once a year. Seven (58%) visited their remote sites between two and six times per year. None of the supervisors traveled to these remote locations more than six times per year.

Supervisors from eight of the ten institutions with staffed locations more than 300 miles from their main campus traveled to the remote locations at least once a year. Only three (30%) visited their remote sites between two and six times per year. None of the supervisors traveled to remote locations in this distance category more than six times per year.

Staff Travel. Twenty-three institutions had library staff based at remote sites between 50 and 150 miles from the main campus. Distant staff from 20 of those institutions traveled to the main campus a minimum of once a year. Eight (35%) visited the main campus between two and six times per year. Six (26%) traveled to the main campus more than 12 times per year.

Eleven institutions were identified as having library staff based at remote sites between 151 and 300 miles from the main campus. Distant staff from all of those institutions travel to the main campus at least once a year. Seven (21%) visit the main campus between two and six times per year. None of the institutions in this group have staff who travel to the main campus more than six times per year.

Ten institutions had library staff based at remote sites more than 300 miles from the main campus. Distant staff from seven of those institutions traveled to the main campus at least once a year. Four (40%) visited the main campus between two and six times per year. None of these institutions had staff who traveled to the main campus more than six times per year.

Staff Training. The initial training of the extended campus library staff was conducted at the remote site where the staff were located in 26 (79%) of the 33 cases and at the main campus in 16 (49%) of the cases. These results imply that the training of new library staff to be based at remote sites is often conducted at both the main campus and the location where they will be working.

The two most frequently used methods for conducting the initial training of the extended campus library staff were: 1) by a library staff member from the main campus (67%); and 2) by a colleague based at the same remote site (64%). A manual was used by 24% of the respondents, and teleconferencing or electronic mail was used by 21% of them. A colleague based at another remote site, training videos, and interactive video were each used by only 6% of those surveyed.

Continuing Education. In the category of continuing education (which included conferences, workshops, seminars, etc.), more professional library staff participated in all categories than did paraprofessional library staff. It was reported by 73% of the 33 institutions that professionals attended state-level continuing education programs, while only 21% reported that paraprofessionals attended at the state level. At the national level, 64% reported that professionals attended, while only 6% reported that paraprofessionals participated.

Thirty institutions responded to the questions regarding funding for professional staff to attend conferences. Thirteen institutions (43%) provided some level of funding for conference attendance for professional library staff; eight of those institutions (27%) reported that conferences were fully funded for remote professional library staff.

Only 20 (61%) of the 33 respondents answered the question relating to conference funding for paraprofessional library staff based at remote sites. Nine of those (45%) fully fund conference attendance for their paraprofessionals, four (20%) partially fund conferences for paraprofessionals, and seven (35%) answered "does not apply."

CONCLUSIONS

As stated previously, the objectives of the survey were to determine: 1) whether academic libraries at institutions that have extended campus programs staffed their remote sites more than 50 miles from the main campus; 2) how supervision, communication, training, and staff development were accomplished for the remote library staff; and 3) whether patterns or models of staffing off-campus library services emerged.

It was considered probable that most of the academic institutions surveyed would not use the model of providing library staff at their extended sites. This assumption was found to be true, as only 15% of the respondents actually staffed their library services operations at remote sites more than 50 miles from the main campus. The survey results showed that it is not a common practice to staff distant sites. The majority (44 of the 77 or 57%) of those institutions with remote sites more than 50 miles from the main campus do not provide library staff to support their programming, and some of those institutions with staffed locations did not staff all remote locations.

Several respondents commented that they use a variety of alternate delivery methods to provide library services without staffing the remote sites. Information regarding such delivery methods was beyond the scope of this survey.

Those institutions that did provide staffed locations clearly indicated a commitment to providing support for their remote library staff in a variety of ways. For example, a supervisor was present at 64% of the institutions, which provided a distinct and consistent contact person for the remote staff. A combination of telephone, telefacsimile, U. S. mail, electronic mail and couriers were the most popular forms of communication between the supervisors at the main campus library and the staff at the remote sites.

Supervisors traveled more frequently to sites located between 50 and 150 miles from the main campus than to those staffed locations beyond 150 miles. This trend may be related to limitations of time and funds available. The survey responses showed that supervisors at seven of the 23 institutions (30%) with locations within 150 miles of their main campus traveled more than seven times per year to the remote site. Much of the supervisory travel may be related to training, since 79% of the responses about training indicated that it was usually conducted at the remote site.

Travel by the remote staff to the main campus was even more frequent than supervisory travel for locations between 50 and 150 miles from the main campus. Staff at ten (43%) of the 23 institutions traveled to the main campus more than seven times per year. For locations more than 150 miles from the main campus, both supervisors and staff traveled less than seven times per year.

In the area of continuing education, which for the purposes of this instrument included conferences, workshops, seminars, etc., the responses indicated that up to 73% of professional library staff participated at the various levels listed in the survey. Paraprofessional staff participated less in such activities. In fact, 18% were not involved in any form of continuing education, while 49% of the respondents indicated involvement at the local level only.

The responses to the question about funding for continuing education showed that 43% of the responding institutions supported some level of continuing education for professional staff, while 55% provided funding for the paraprofessional staff.

The survey results indicated that most institutions used a combination of professional and paraprofessional staff; however, the majority of staff coverage was provided by paraprofessionals. The prevalence of this model of staffing could be explained as a budgetary issue, since paraprofessional salaries are usually lower than professional librarian salaries.

Another pattern that emerged is that of multiple staffing. Two or more people are employed at 51 (61%) of the 84 staffed sites identified by the survey. This staffing model should serve to provide local patrons with a variety of library service, as well as relieve some of the feelings of isolation that may occur when a single person provides library services at a great distance from the main campus.

LOCAL APPLICATION OF THE SURVEY RESULTS

National-Louis University has seven academic centers located more than 50 miles from the main campus in Evanston, Illinois. Four of these locations, all of which are more than 300 miles from the main campus, are staffed by professional librarians whose contracts range from full-time to about 10% of a full-time position. The survey results show that the use of library staff supervised from the main campus is a common model for those institutions with staffed sites located more than fifty miles from the main campus. NLU has a designated supervisor for its remote library staff, the Coordinator of Off-Campus Library Services, who is based at the main campus.

Communication between the NLU University Library at the main campus and the remote library staff is accomplished through the use of eight of the ten methods listed in the survey. Interactive video and a library newsletter are not currently used. National-Louis compares favorably with those who responded to the survey. However, it is important to continually seek to improve communications in order to deal with the challenges caused by the distance between the supervisor and the remote library staff, since face-to-face or in-person communication between local and distant NLU library staff is not currently possible on a regular basis.

Those library personnel serving an institution at a distance need the direction and guidance that can be best provided by on-site training and review, coupled with regularly scheduled visits to the main campus. NLU's Coordinator of Off-Campus Library Services generally does not visit these locations due to lack of funding to support such travel. This situation is recommended for review based on the survey results which showed that supervisors visited their remote staff at least once a year. It is currently a policy of the University Library, however, that the librarians from the extended sites travel to the main campus twice a year to participate in institutional faculty workshops and library staff development activities.

The Coordinator does travel to the extended sites when new personnel must be hired and initially trained. Initial training is provided by the Coordinator at the extended site immediately after hiring. Additional training is conducted through the same methods used for communication and at the main campus during the semi-annual faculty workshops.

Continuing education is partially funded for full-time NLU librarians only. Whether funded or not, the extended campus librarians participate in a variety of continuing education opportunities at the national, state, local, and institutional levels.

According to the results of the survey, National-Louis is one of very few institutions that provides library staff to support extended site academic programs. In fact, only ten of the 220 institutions that responded to the survey staff locations more than 300 miles from the main campus, as are four of the National-Louis University distant sites. Inherent in the use of this model of staffing locations more than 300 miles from the main campus for library services are human resources and fiscal challenges. For example, the informal feedback from the NLU remote librarians frequently includes comments about feelings of isolation and separation from the home base.

The staffing pattern currently used by NLU reflects a dedication to providing excellent extended campus library services which include librarians to provide bibliographic instruction and facilitate library access.

Unlike the majority of respondents to the survey, NLU has chosen to staff its remote sites with professional librarians rather than paraprofessionals. Five of the six remote NLU librarians are part-time professionals. This staffing pattern was used by only 10% of the survey respondents. Most of the 33 institutions that met the survey criteria reported the use of more than one library staff member at each location. This level of staffing is currently in place only at National-Louis' Tampa and St. Louis locations; however, the provision of more than one person at each site may have a positive effect on the morale and job satisfaction of the remote library staff.

Due to the extreme distances involved, we strongly recommend that NLU increase the funding available for support of these remote librarians. The three areas recommended for increased budgetary support are: 1) regularly scheduled travel by the Coordinator to the remote sites as a supplement to the twice-yearly visits of the remote librarians to the main campus; 2) enhancement of communication through the implementation of a regularly published library newsletter and the development of an interactive video system; and 3) increasing the number of library staff to at least two at each distant site.

RECOMMENDATIONS FOR FUTURE RESEARCH

The survey results and the paucity of relevant professional literature suggest that further research into the issues of personnel management for distant academic library staff be conducted. For example, an attitudinal survey of the remote staff might provide useful information on improving personnel management practices in order to increase morale and levels of job satisfaction. A comparative analysis of staffing patterns and personnel management procedures between those institutions with extended sites less than 50 miles from the main campus and those with extended sites beyond 50 miles from the main campus would be useful in providing additional insights into the impact of distance on staffing patterns and personnel management issues.

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Library Service to Non-Resident Students; Its Impact on Campus Libraries

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INTRODUCTION

The growth of educational programs for non-resident students has brought attention to the problems of providing library services for these students. As a result various programs have developed with a corresponding body of literature detailing the nature of the programs. In contrast little attention has been focused on how these programs impact traditional library services. It has been acknowledged that problems do occur particularly when students rely on the services of institutions not connected to the one sponsoring the educational program, but the effect of non-resident programs on traditional library services has not been systematically investigated.

It is my intent to identify the ways in which traditional library services are affected by educational programs for non-resident students. This is to be done by looking at two types of educational programs. One is be Central Michigan University's program which has a well developed system of library service and relies heavily on the collection at the main campus. The second type of educational program is one where the sponsoring institution relies primarily or totally on services from other institutions.

The intent is to determine whether a well developed program significantly changes the nature of the services provided to students and faculty, and to what degree the program impacts traditional services on that campus. Another result of this study is to find out how other libraries are affected by the non-resident student's need for library services and to what extent this burden is lessened by having a well developed program at the sponsoring institution.

BACKGROUND

In the recent past there has been a phenomenal growth in the number of higher educational institutions offering off-campus courses. Central Michigan University was one of the institutions that started their program early on with the knowledge that providing library service to the students in the off-campus program was going to be a major issue in the success of the program. While some institutions chose to establish satellite libraries to provide service and other chose not to provide service at all, Central Michigan University decided to use the campus library collection for off campus students.

In this context Central's Extended Degree Program (the current title) in conjunction with the campus library hired staff whose function it is to provide reference, bibliographic instruction, and to retrieve and deliver information to off-campus students. The hiring of special staff for this purpose results in little or no day to day interaction between the off-campus division and the on-campus divisions. At the same time the off-campus division relys on some of the services of the campus library to make the information available for delivery to off-campus faculty and students. This then raises the question, to what extent is the on-campus library affected by providing these services.

At the same time it is well known that off-campus students often use libraries located near the geographic area where they take courses. This raises the question of how these various campus libraries are affected by servicing the information needs of the off-campus students.

LITERATURE SURVEY

My first attempt at answering this question was to find out what others have written on the topic. I discovered a complete absence of discussion about the impact of off-campus service on-campus libraries. The only reference to the topic was a simple mention of the fact that some institutions benefit from the services and resources of other libraries without acknowledging or compensating them (Anguilar and Kascus 1991). Therefore all of my data would have to be generated by the use of surveys.

METHODOLOGY

Surveys were developed with the intent of identifying whether institutions which service students or sponsor programs for off-campus students bear the burden of additional problems as a result of helping these students. I was not concerned about whether these problems are typical of all off-campus programs but rather was attempting to identify whether there is an aspect of off-campus service that is being overlooked and deserves more in depth study. Therefore, in addition to Central Michigan University, I chose to study institutions which are known to get heavy use from off-campus student programs.

The institutions to be surveyed were divided into three groups. To gather data on how Central's off-campus service affected the campus Library, each division of the main campus Library was surveyed concerning the services they provide to the off-campus services division. To find out how Central's off-campus program affected other libraries, surveys were sent to institutions in the metropolitan Detroit area where Central has a large off-campus program. To obtain information on how other types of programs affect different institutions, surveys were sent to out of state libraries which provide service to off-campus students. Because institutions sponsoring the off campus program would have little or no data on how their programs affect libraries at other institutions, I decided to obtain the information by focusing on the libraries that provide the service.

Only a small number of institutions were surveyed and they were chosen because they were known to provide service to students from other campuses. Each grouping was given a different survey developed to generate data about the type of service they provide and the particular students they serve. Three surveys were not returned, of these three one was mailed but the envelope was returned empty. Because I was using such a small sample it would be impossible to do any meaningful statistical analysis of the data. Therefore my analysis will come from a compilation of the data according to the three groupings identified above.

RESULTS

The divisions of the campus library at Central Michigan University that returned surveys were reference (including documents), cataloging, acquisitions, circulation, stack maintenance, interlibrary loan, reserve, non-print media, and graphic production.˜ In general, all of the services these divisions provide the off-campus division (OCLS) are services that are within their normal activities. In some cases a major portion of a particular function is done for the off-campus division. This is the case in acquisitions and cataloging, where they acquire and catalog materials purchased by the off-campus division. Most of the materials purchased become a part of the main collection; therefore, the main campus receives benefits from that relationship. Cataloging reported that 20.25% of their search/hold/recall process for books is from OCLS request. Reserve provides access to approximately 130 journal titles for OCLS. Stack maintenance reported that 1/3 of the microfilm reshelving and 1/4 of the periodical reshelving is related to OCLS requests. No one reported an increase in work load heavy enough to need additional personnel to perform any function.

A few divisions mentioned slight alternations in procedures for OCLS service. The only area where this seems to have a significant impact is in stack maintenance where OCLS removes large numbers of micro-forms for copying, which is not allowed for on-campus operations. While these materials are away they are not available for use by on-campus students.

A second set of surveys were sent to general and law libraries in the Detroit area, and all were returned. Law libraries were included because of the high number of OCLS classes which are concerned with legal issues. While all of the general libraries stated that they provided reference services to off-campus students, only one could specifically identify CMU students as users of their services which included reference, use of CD-ROM products, online searching, document delivery, interlibrary loan, and circulation. In providing these services, except for reference and interlibrary loan, off-campus students are charged fees which their own students do not pay.

The situation at the law libraries was similar. One library could not specifically identify CMU students as users, but they do provide reference service to off-campus students. This particular library does not allow the off-campus students to check out books, search databases or use their computers. The limited service they provide off-campus students may be the reason they cannot identify who is using the library. One law library did identify CMU student as users of reference services. While they could not state positiuvely that CMU students use other services, they do provide bibliographic instruction, library guides and some online searching for off-campus students. At the present time they do not charge fees for any of these services, but the issue is under consideration. Students can get a library card for an annual fee,but are not allowed to use AV materials, the computer labs or study rooms. The survey from one library indicated that the quantity of the reference business they receive from off-campus students is great enough for them to need more personnel. All of the libraries were asked if there was any discussion underway for solving the problems related to off-campus users either on a statewide or university wide basis, or between various libraries. Two indicated university wide consideration while one indicated discussion between various libraries.

The third group surveyed was the out of state libraries. All of them stated that they provide service to off-campus students both having library support from their own institutions and students not having any support. When the students had support it was divided equally between institutions with nearby campuses and distant campuses. Except for reference, the type of service each library was asked to provide varied. One library received requests for online searching and the circulation of materials, they did not do the online searching. Another library was asked to do bibliographic instruction and interlibrary loans, they provided both with ILL use being restricted. The same library was asked to provide BIs and reference service at times the staff is normally not available for those purposes, they did provide the serivce. They also charged non-affiliated users for all of their services they provide, limit borrowing and forbid the use of reserve material. The ILL service they provide is not given to students from private institutions. None of the other libraries charged any special fees, but one does not allow these students to borrow materials.

Two libraries indicated that providing services to off-campus students has resulted in the need for more personnel. When asked if there had been any attempt at finding new solutions, the question seemed to be interpreted very differently. One library said no; another said yes, on a statewide basis; and a third said yes, between various libraries. All of these libraries were in the same state. The variation in the answers limits their usefulness for any comparative purposes.

ANALYSIS

The first problem that was identified during this study was the difficulty in determining which students are using a given library, to what extent they are using the library, and why they are using library resources from institutions beyond those provided by the sponsoring institution. Is it because the sponsoring organization is not providing resources, is not providing adequate resources, or convenience of location? This question alone could be the focus of another study. Answering this question would have significance for any future attempt to remove the impact on other libraries. Without this information it is difficult to form conclusions about the degree to which well developed programs of library service for off-campus students lessens the burden on other libraries, but other useful information can be obtained from the study.

In terms of how other libraries are affected by the non-resident student's need for library services,it is clear that it is increasing their workload. The degree to which the work is increased varies among libraries. This seems to be partially based on the number the type of resources a given library has and partially based on a given library's willingness to accept the additional responsibility. Among the respondents there was no clear division between large and mid-sized institutions in terms of which ones were being affected the most. There was also no clear division as to the type of service a given library was likely to provide students from other institutions, but the function most affected in all libraries was reference.

Determining if a well developed library service program for off-campus students and faculty changes the nature of the services provided is in one sense easy to answer. An organization that establishes its own library service program has the resources of the campus library to support the off-campus function. This not only refers to the collection of the campus library but also the technical support functions. In terms of technical support, it would be difficult for students or faculty to request services of an institution to which they had no affiliation. Neither a student nor a faculty member from one institution would be able to expect that another organization's library purchase, catalog, or reserve materials for their programs. Therefore a library programs at the sponsoring institution provides a level and type of support not available to the students and faculty without support from their own programs.

In regards to the typical public service functions the differences are less clear. Most libraries seem willing to provide reference service to anyone that requests it. Therefore, under present arrangements one would assume this service would be available with or without a program from the sponsoring organization. But with the constant increase in the number of requests for reference service, libraries may become less willing to continue providing this service. As for other public services such as online searching and BIs, many libraries are already limiting access or charging fees to users from other institutions. Therefore a program at the sponsoring organization, such as Central which provides these functions, means the students have access to services or a level of service not given students at institutions without library support programs.

The last issue is, to what extent does the off-campus program at Central impact traditional library services on-campus. Using the data obtained at Central Michigan University it is evident that all divisions are affected by the off-campus program, but to varying degrees. The area least affected is reference which is in complete contrast to the program's impact on other libraries. The reason for this is rather obvious. It was the services normally provided by the reference department that the staff in OCLS was hired to provide for off-campus students. While the reference department may on occasion answer a question for an off-campus student if they call or come in the building, the primary impact is the use of reference sources by off-campus librarians. It is the other areas of the library that are affected the most. While no individual division of the library has been affected to the degree of needing additional personnel, the total impact on all divisions might be great enough to justify more staff. As mentioned it is the totality of time spent on off-campus services by campus staff, and the impact on the availability of materials for campus uses that could be the bases for further study.

CONCLUSION

This study was an attempt at identifying how off-campus programs affect libraries both at the sponsoring organization and other institutions. At present libraries are neither funded or staffed in ways that are intended to absorb the full impact of providing services to off-campus students even at the institution where there is a service program in place. Creative solutions to the problems identified in the study are not likely to be found within an individual library which has little choice except to restrict service. While the creation of a service program at the sponsoring organization prevents much of the work from being shifted to other places, students still need resources beyond those in their own institution. I believe there needs to be more study of the issues involved and that solutions will only be found by libraries working together on a statewide basis or beyond. If libraries are going to be serving large numbers of students from other organizations then this needs to be addressed in the way they are funded and staffed. Because public organizations are funded differently in each state there is no one solution to the problem. The issue as are not likely to go away but are likely to become more of a problem as technology increases the opportunity for teaching at distant locations.

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Providing Library Support for Distance Learning: Acquisitions Issues

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In reviewing the professional literature and recent conference programs on library services for off-campus sites, most of the focus centers on providing reference service, library instruction, document delivery, and access to the home campus' online catalog for the faculty, staff, and students at that site. Very little has been written about the acquisitions issues facing libraries serving off-campus patrons.[1]

Given the paucity of information on the subject, the Park College Library's experience may prove instructive.

INTRODUCTION

Park College, a 118-year-old comprehensive college located in Parkville, Missouri, near Kansas City, has for much of its history been a traditional liberal arts college. In recent years, it expanded beyond the home campus to offer degree completion programs at the associate's and bachelor's level as part of the School of Extended Learning which includes the Military Residence Center System (MRCS); Corporate Education; and the Metro Park and Portfolio programs. The Military Residence Center System covers Army, Air Force, Navy, and Marine Corps sites throughout the United States where courses were first offered at military sites as early as 1972.[2] A decade earlier, through the Military Degree Completion Program, military personnel attended courses full time at the home campus. As the emphasis shifted from on-campus to on- base education, the College developed programs to fit these needs. At present, enrollment in these programs is over 10,000 students nationwide where classes are taught year-round in five nine-week terms. At each base or post, the faculty and staff are hired locally.[3] Degrees are offered in management, computer science, criminal justice administration, social psychology, and liberal studies among others.

The Park College Library provides reference service, document delivery via fax and mail, and access to the online catalog via an 800 number to the sites on demand. While these traditional public services are available, the Library also purchases books, periodicals, equipment, and audiovisual materials for the sites. Library support at the local level has been incorporated into degree completion programs in a variety of ways. Colleges and universities providing the courses see the importance of bolstering base library collections for their students. The Army, Air Force, Navy, and Marine Corps require in their contracts with these educational institutions that a portion of each site's tuition income be spent on local library resources. In some states, local and regional accreditation standards review library support.

The support of instruction at off-campus sites at Park College requires the active participation of home campus personnel, Park College off-campus on-site personnel, as well as military base/post personnel. All of the following individuals play an important role in the acquisitions process. The Military Residence Center System (MRCS), administered by the Assistant Vice President for the School of Extended Learning, oversees all aspects of base education from recruiting and admissions to graduation. Admissions, financial aid, and registrar's functions are handled on the home campus. Each site has a Resident Center Administrator (RCA) and an Academic Director who report to the Park home campus. The RCA supervises and coordinates all the activities at the site. The Academic Director works with the on-base faculty, evaluates the quality of instruction, and chairs faculty meetings. The base or post Education Services Officer (ESO) works with all of the colleges and universities on a site to guarantee that the educational needs of their personnel are being met. (See Figure 1.)

Figure 1

Personnel

Park College Home Campus-

- School for Extended Learning Director and Staff
- Park College Library Director and Staff
- Faculty Program Coordinators

Park College On-Site Staff-

- Resident Center Administrator (RCA) and Staff
- Academic Director (AD)
- Adjunct Faculty

Military Site Funded Positions-

- Education Services Officer (ESO)
- Base Librarian and Staff

Library support funding allotted to each site is determined as a percentage of the tuition generated during the five terms in the previous fiscal year. For the 24 sites participating during FY 92-93, library support funds totaled more than $100,000.00. The budget for each site is sent to the site in a letter explaining the process and providing a timeline for response. Upon receipt of that letter each Resident Center Administrator (RCA) is asked to:

- consult with the local Park College faculty and administrative staff to identify material needed to support local Park College courses
- consult bibliographies developed for each course by Park College home campus department chairs (part of the course syllabi available for each course)
- provide a list of suggested purchases to the base/post Education Services Officer (ESO).

The Education Services Library Committee consisting of the base librarian, the RCA, and the Park College Academic Director (AD), with the ESO acting as chairperson, reviews the recommendations made by the RCA and generates an approved list of resources to support Park College programs at the site. This list is then checked against the base or post library holdings to avoid duplication. The approved list is then forwarded to the director of the Park College Library for processing.

Purchasing criteria employed by the RCA and the committee stipulate that:

- resources must support the Park College curriculum
- ownership of the resources must be relinquished by Park College to the base library
- resources must be housed in the base library
- resources must be available for library patrons' use

Upon receipt of the approved resource lists, the Park College library director proceeds to place orders with appropriate vendors. Items on the lists fall into five major categories: books; journals; non-print resources (i.e. transparencies, audio and video tapes, computer software, etc.); CD-ROM periodical indexes with supporting hardware/equipment; and miscellaneous supplies. The sites have ordered more than 520 books for placement in the base libraries during this fiscal year at an estimated cost of almost $22,000. More than 240 journal subscriptions have been processed, costing over $22,000. (See Figure 2.) Ten sites have spent almost $32,000 leasing CD-ROM periodical indexes and more than $10,000 was spent on non-print AV resources. By definition this funding cannot be used for instructional support, so all equipment was placed in the base library for use by library patrons.

Journal orders are placed with a single vendor and shipped direct to the base library. Proper credit is ensured by placing the words, "Provided by Park College" as the second line of the mailing label. This not only indicates where the journal should go but by whom it is provided. This also calls to the attention of the library staff the source of the journals and serves as a public relations tool for the college.

It has been found that a single vendor for journals reduces confusion. The vendor has been very cooperative in following up on missing items and has been willing to invoice separately for each site.

CD-ROM products including hardware are ordered to be shipped direct to the base library. The base librarian selects the specific item(s) which he or she would like to have and, generally, the home campus library director negotiates with the vendor.

Figure 2: 1992-93 Park College Library Support Spending

Resource Category	Dollars Spent	% of Total Dollars Spent
Journals (241 titles)	$22,341	26%
Books (521 titles)	21,948	25%
CD-ROM Indexes (10 sites)	31,843	36%
Non-Print Resources	10,410	12%
Miscellaneous	1,114	1%
Totals	$87,647	100%

The RCAs are encouraged to arrange for the local purchase of AV equipment and miscellaneous supplies. Generally a local supplier can provide a competitive price and will be available to provide follow-up service and maintenance. When a bid or quote is received at the site, it is sent to the library director and a purchase order is generated.

Most other items (monographs, non-print resources, and miscellaneous supplies) are ordered and shipped to the home campus for checking in and reshipment. While it is a somewhat cumbersome process, it has been found to ensure that the items are received by the right person at the right place. Often, in the past, when items were shipped direct from a vendor to a large military base, they failed to reach their intended destination. By shipping them direct from the home campus to the Park College office at the site, items can be tracked more effectively. This process also ensures that the vendors receive payment in a timely manner.

Items are shipped to the RCA, where they, upon receipt, are turned over to the base librarian for technical processing. At several sites the passing of the resources from the Park College personnel to the base librarian is considered an event which is marked by a celebration, drawing attention to the contribution of the college to the base library. It becomes a public relations activity resulting in positive exposure of Park College to all at the site.

Invoices are sent by the vendors to the Park College home campus library director who approves them for payment by the college. The director monitors the spending at each site and keeps the RCA informed regarding balance remaining available. Semi-annual and annual reports are generated for the military indicating the amounts spent and items purchased for each site.

By placing the resources in the existing base library they are made available to all library patrons during all hours of base library operation, not just to Park College students when the Park College offices might be open. In addition, processing, maintenance, and circulation is provided by professional library staff at the base library rather than the administrative staff at the Park College site.

It has been found that resource selection at the point of use is most valuable. The committee at each site is most aware of and sensitive to the needs of the students and faculty and the relative strengths and weaknesses of the existing base library collection.

SUMMARY

Park College and the branches of the United States military for whom Park College provides degree completion programs at 28 sites around the country recognize the importance of library support for their students. The program explained here is an effective means of providing that support.

The process contains several inherent weaknesses which must be addressed. The overall process is somewhat cumbersome and labor intensive. It is somewhat time consuming and does not always provide the resources to the point of need in as timely a fashion as might be desired.

On the other hand, the process described above does provide the resources needed by the student in a convenient way at the place of need. It also provides those resources for a broader group of patrons than just the Park College students, in the base library. The selection of resources is made by those most qualified to do so, at the scene of their use. The processing of the orders by the home campus library and the processing of the materials by the base library, are both done by those who can do that processing most efficiently.

The system which is used to provide resources to the students of Park College at off-campus sites has evolved into an efficient and effective system. As student needs, instructional technology, and information resources change, the library support program implemented by Park College will evolve to meet changing demands.

NOTES

1. A recent literature search on ERIC Silver Platter resulted in finding one ERIC document (1981) in which library acquisitions matters were discussed.

Davila, Daniel. *Administrative Supports Necessary to Insure Faculty Commitment: The Learning Resources Center of Passaic County College Model for Delivering Library Services to the Faculty and Students in the Institution's External Program.* (ERIC microfiche ED215-721).

2. Sites are located at the following bases or posts: Little Rock AFB, AR; Davis-Monthan AFB, AZ; Lowry AFB, CO; Camp Peñdleton Marine Corps Base, CA; Mountain Home AFB, ID; Scott AFB, IL; Fort Leavenworth, KS; Fort Leonard Wood, MO; Whiteman AFB, MO; Malmstrom AFB, MT; Holloman AFB, NM; Cherry Point Marine Corps Air Station, NC; Grand Forks AFB, ND; Newark AFS, OH; Wright Patterson AFB, OH; Tinker AFB, OK; Beaufort Marine Corps Air Station, SC; Bergstrom AFB, TX; Corpus Christi Naval Air Station, TX; Fort Bliss, TX; Kelly AFB, TX; Lackland AFB, TX; Laughlin AFB, TX; Hill AFB, UT; Military District of Washington, DC; Fairchild AFB; WA; Marine Corps East and West Coast Deployment.

3. Faculty members must have at least a Master's degree in their teaching field. Applications are screened by the home campus program coordinator who is generally a full time faculty member.

Statewide Resource Sharing:
A Foundation for Off-Campus Library Services

Susan L. Potter
Regis University

INTRODUCTION

The position of Assistant Director for Extended Library Services at Regis University has encompassed a wide variety of responsibilities in its first few years of operation. Included in the original job description were such duties as to: 1) Identify, plan, and oversee library services and resources in support of extended campus programs, 2) Assess the needs of the extended campus community for library resources, services, and facilities, 3) Prepare written profiles of the extended community's information needs, 4) Develop written statements of immediate and long-range goals and objectives, 5) Involve academic community representatives in the formation of the objectives and the regular evaluation of their achievement, 6) Determine the existing library support, its availability and appropriateness, 7) Participate with administrators and teaching faculty in the curriculum development process, 8) Promote library support services to the extended campus community, and 9) Coordinate planning with Regis library faculty and staff. These responsibilities provided a starting point for the activities of the department.

The Extended Library Services Department has now been in existence for three years and currently serves sixteen extended campus locations. As with all new departments, its original goals and objectives have undergone a gradual transition. One recent area of responsibility that has fallen naturally to the Extended Library Services Department is that of representing the University Libraries in the resource sharing efforts of the state.

Resource sharing can be defined in many different ways. The ALA Glossary of Library and Information Science defines it as: "A term covering a variety of organizations and activities engaged in jointly by a group of libraries for the purposes of improving services and/or cutting costs. Resource sharing may be established by informal or formal agreement or by contract and may operate locally, regionally, nationally, or internationally. The resources shared may be collections, bibliographic data, personnel, planning activities, etc. Formal organizations for resource sharing may be called bibliographic utilities, cooperative systems, consortia, networks, bibliographic service centers, etc." (Williams 1992)

In a "traditional" college or university setting, resource sharing is valuable in providing a wider range of information to faculty and students than what is easily available on their campus. In a "non-traditional" setting with the existence of many extended campus programs, resource sharing is sometimes crucial to the ability to provide even basic information to faculty and students. The backbone of extended campus library services is cooperation amongst libraries at a local, state, national or international level. For the institution offering extended campus courses, this is not a mode for escaping the responsibility of providing library services, but instead a way of fulfilling that very responsibility. Extended campus librarians are entering an era with potential for offering patrons a very powerful array of services. For this reason, it is advantageous for extended campus librarians to become aware of and participate in the resource sharing activities of their geographical area.

AN HISTORICAL PERSPECTIVE ON RESOURCE SHARING

Resource sharing can vary dramatically in its activities and protocols from state to state. Colorado has a rich history of resource sharing projects. "Many resource sharing activities and cooperative agreements, from combined catalogs to courier services to shared electronic databases to reciprocal borrowing agreements, are or have been in place for a long time in Colorado." (Taber 1992). A resource sharing study of the state was conducted by the Colorado State Library from September, 1987 through June, 1988 with the following objective: "To assure that Colorado residents, through their local libraries, [were] able to obtain materials, and answers to reference questions, through the most efficient means possible." (Boucher 1990) These efforts have laid a critical foundation for the library services that may be offered to off-campus students today.

A regional union card catalog maintained between 1935 and 1978 in Colorado allowed the Bibliographic Center for Research (BCR) to act as a clearinghouse for interlibrary loan (ILL) services. In 1979, the OCLC ILL Subsystem expedited this process further. In the early 1980's, MARC records on magnetic tape made it possible for libraries to build individual catalogs on computer systems. The Colorado Union Catalog (CUC), a Colorado State Library project, used these tapes to construct a microfiche catalog available to libraries throughout the state. During the same time period, two major computer networking systems came into existence: the Colorado Alliance of Research Libraries (CARL) and IRVING. (Fayad 1992) Regis University joined the CARL system in 1987, allowing students to access its book collections through any CARL terminal located nationwide or, in the Denver Metro area, through dial-up procedures free of charge.

Membership in CARL was a major turning point for the Regis University Libraries. Not only does this on-line computer system provide Regis faculty and students with access to the Regis book and journal collections, it also allows access to the catalogs of most of the major research libraries in the Colorado/Wyoming area, a host of smaller libraries in the region (many located in areas where extended campus courses are being taught) and a selected number of libraries nationwide. An added feature is the ability to access an array of commercial journal indexes and information databases easily located on the main menu of CARL. Several locally-generated databases and a library system news section round out the system's offerings.

One journal index available on CARL deserves further mention. That is the UnCover Article Access database. This multidisciplinary database was released in 1988 to members of CARL. Many additional libraries are currently able to access this index through gateway connections. UnCover indexes the journal collections of eight CARL libraries. Each of these libraries sends its journals to CARL Systems, Inc., where they are checked in and their tables of contents entered into the database. The journals are returned to the libraries within twenty-four hours. Because of the diversity of the member libraries' collections, this index covers almost all subject areas. UnCover contains over 10,000 journal titles and over 900,000 article titles. (Kroeger 1990)

Current Resource Sharing Strategies

Recently, a number of developments in the state of Colorado have combined to enhance resource sharing efforts. These developments have the potential for greatly expanding library services offered to the extended campus patron.

The Colorado Resource Center, established through a contract between Denver Public Library (DPL) and the Colorado Department of Education, allows DPL to use its collection and staff to make information resources available to Colorado citizens. Five necessary elements of resource sharing - collection, staff, equipment, access and attitude - coalesce to make this project possible. Librarians from every corner of Colorado can access the Colorado Resource Center through a toll-free number. In 1991, 23% of DPL's 827,150 reference questions in person or by telephone were from non-Denver residents. 2,212 questions were answered on the toll-free number. 10% of items circulated were to non-Denver residents. The Colorado Resource Center processed 36,218 interlibrary loan requests. (Cumming, 1992) Regis University faculty and students in small towns and remote locations were able to take advantage of these services through their local libraries.

The Colorado Library Card, a primary project of the Public Relations Committee of the Colorado Library Association for 1991-92, allows Colorado residents to borrow materials from any participating library in the state. The advantages of the project are many. The Colorado Library Card:

- Opens all library doors to every Colorado resident
- Stretches tax dollars
- Supports literacy and reading
- Encourages every Colorado library to participate
- Increases public awareness of libraries
- Provides opportunities for school and community partnerships
- Eases the strain on book budgets.
- Makes reimbursement available for postage and lost materials
- Maintains lending library control

Currently, 64% of public libraries, 57% of regional systems, 43% of academic libraries, and 14% of school buildings in the state are participating in the project. (The Colorado Library Card Program, 1992) Regis extended campus students are already making frequent use of the opportunity to use resources and borrow materials from a variety of libraries.

The implementation of the Access Colorado Library and Information Network (ACLIN), a Colorado State Library project, is further easing access to library collections throughout the state. ACLIN is built upon the existing foundation of automation and network activity. Library computers, online catalogs and phone lines are used to link libraries in a statewide network. ACLIN's primary purpose is to "provide equal access to information for all residents, and support such activities as adult education, retraining, literacy education, distance learning ..." (Fayad 1990) The ACLIN project began with the merging of activities of several groups, Global/Global (which met to discuss how to search beyond the CARL system), the Colorado Council for Library Development (which allocated $75,000 to resource sharing) and the initiative of John Irwin, State Representative from Loveland and his supporters (who worked with the State Library to eventually sponsor HB1230 that gave birth to Access Colorado). The goals of the project were: 1) To provide access to Colorado libraries to all residents without long distance charges, 2) To add as many non-CARL libraries to the system as possible, 3) To make available a wide range of information databases to state residents and 4) To provide E-Mail to Colorado residents. (Bolt 1992)

The first step after legislative approval of ACLIN was to establish an advisory committee which began the work of setting objectives and monitoring activities. (Bolt 1992) As the legislature provided authorization for the project, but no funding, the first major activity was to raise the estimated $600,000 needed for implementation. This was accomplished by forging an agreement with Colorado SuperNet whereby Access Colorado would provide the capital to implement the network and SuperNet would credit Access Colorado with future years of service. Funding from LSCA and other grants, Apple, US West and City Market helped to accomplish this goal. (Fayad 1991) Goal #1 is now completed and will be advertised heavily to the public in the fall of '93.

Goal #2, to add non-CARL library catalogs, is well underway with the addition of University of Colorado in Colorado Springs, Colorado College, and University of Southern Colorado (all non-CARL libraries) to the system. Plans call for the addition of a number of non-CARL public libraries such as the Jefferson County and Aurora Public Library systems by the fall of '93.

Goals #3 and #4 are still in progress. Goal #3, to make available a wide range of information databases to state residents, has been the topic of a great many discussions recently. This goal addresses not only the larger commercial databases, but also smaller locally-generated information databases. It is important in resource sharing projects not to lose track of valued information about local issues. (Brunvand 1992) A meeting held in mid-May, with guest speaker Diana Young of the successful North Carolina Information Network, began to outline the database needs of Colorado residents.

E-Mail is now available to libraries purchasing Colorado SuperNet accounts. The focus of Goal #4 is to provide an E-Mail structure directly through ACLIN, allowing libraries to communicate with each other free of charge.

Regis University extended campus students are currently able to use ACLIN to access CARL and other library systems from anywhere in the state of Colorado without having to pay a long distance telephone charge. Students will have free access to the catalogs of all the major libraries in the state, as well as selected journal indexes and information databases, from anywhere in the state when all four goals of the project are attained.

Advances such as the Colorado Resource Center, the Colorado Library Card and ACLIN are changing the way that libraries think about resource sharing. A paradigm shift is being made in collection development from "just in case" collecting to "just in time," from ownership to access, and from collecting to delivering. "Outsourcing to information brokers, which once meant primarily database searches, ... now encompasses information delivery, including summaries, analysis, and full text." (Chambers 1992) Publicly-supported Regional Library Systems, originally formed in the 1960's to encourage cooperation among libraries, are now seeing an emerging trend to increase their roles in coordinating microcomputer networks, the Colorado Library Card, cooperative purchasing programs, direct interlibrary loan through ACLIN, fax networks, union listing activities and shared automation systems. (Ulrich 1992) Through a Library Services and Construction Act (LSCA) grant, The Three Rivers Regional System planned, organized and designed a data collection project that will serve as a basis for future cooperative collection development. The "collection snapshots" gathered in this project will serve as models for involving libraries of all sizes and types in similar activities in the future. (Scott 1992)

The formation of the Colorado Resource Sharing Program is another development with many positive implications for the future. The group was appointed by the Colorado Department of Education - State Library and Adult Education Office in January of 1991. Its charge was to evaluate the current status of resource sharing among Colorado libraries and to plan for its improvement and continuing development. The group's focus has become "library activities based on the mutual cooperation of two or more libraries for the purpose of improving service and/or reducing costs through the pooling or exchange of physical, human, and fiscal resources." The strategic planning process has been to establish an "action plan" for each component of resource sharing in Colorado including assumptions, goals, strategic objectives, assignments related to each objective and specific timelines. (Williams 1992) The Resource Sharing Strategic Planning Committee (RSSPC) lists eleven goals (Appendix #1). These goals are then amplified by a set.of objectives included in which is one to "create a program to identify, acquire, and make available electronic information products on the Access Colorado Library and Information Network." (Appendix #2) The newly-formed Colorado Consortium of Database Networking (CCDN) has begun work on implementation of this objective.

The CCDN evolved out of a task force originated by the CARL Associates following a particularly harrowing set of negotiations with a vendor to add a database to the CARL platform. A need was felt to solidify procedures that could be uniformly followed any time a database was under consideration for addition to the system. After several meetings, the task force expanded its focus to include all Colorado libraries and left the auspices of the CARL organization. It applied, successfully, for sanctioning as part of the Colorado Resource Sharing Committee where it remains today.

The CCDN has plugged itself into objectives 2.2 and 2.3 of the RSSPC strategic plan through submittal of a proposal to the group. (Appendix #3) A charge was then issued by the RSSPC to the CCDN. (Appendix #4) The three basic purposes of the CCDN are: 1) To acquire greater assets by increasing the resources available to our patrons, 2) To lower the cost and minimize risk for each participating library by consolidating services to libraries and other institutions and 3) To improve cooperative relationships and resource sharing throughout Colorado by providing information that can be used by all sizes and types of libraries and other institutions.

Immediate strategies of the CCDN dictated a focus on three activities. First was the implementation of a statewide library survey to determine interest in hosting or subscribing to databases. Second was the formation of a database clearinghouse through a listserve or bulletin board through ACLIN or the Colorado SuperNet. Third, was the development of a set of guidelines for adding a database to a statewide network.

Preliminary results of the survey are now available. (Appendices #5 and #6) Question one on the survey gathered basic information about the libraries responding (including whether or not they had Internet accounts). Question two allowed libraries to rank their top five database desires. Question three was intended to determine how many libraries had the ability to access ACLIN (and therefore the proposed database clearinghouse). Question four identified the type of library computer system currently being used as a public access catalog and attempted to locate potential database hosts. Included in this question was a section that allowed libraries maintaining their own systems to list local databases that might be made available to a wider range of patrons in the future. Question number five allowed for additional comments on any parts of the survey. A selection of responses is included in Appendix #6. The committee's charge is now to further analyze the survey results and develop both a proposal for the database clearinghouse and a draft of guidelines for adding a database to a statewide network.

Future strategies for the CCDN range from providing consultation services to negotiating with vendors for statewide licensing of databases. The benefit of this kind of project to off-campus students is obvious. With ACLIN in effect, the greater the number of databases available through systems such as CARL and DYNIX, the greater the opportunities for research by students in remote locations.

CONCLUSION

Statewide resource sharing has facilitated the offering of extended campus library services in Colorado in countless ways. The Colorado Alliance of Research Libraries (CARL) online catalog has provided access to bibliographic records for the Regis book and journal collections throughout the state and in selected locations nationwide. The CARL system has also served Regis students by making available several journal indexes with the potential for full-text delivery. Colorado regional systems have worked together to streamline ILL procedures and courier services.

More recently, the Colorado Resource Center (CRC) has worked to provide its services to all libraries, therefore Regis students, statewide. The Colorado Library Card has made it easier for Regis students to make use of a variety of local libraries. Access Colorado Library Information Network (ACLIN) now allows Regis students to dial into CARL from anywhere in the state without paying long distance phone charges. It also allows Regis students access to selected non-CARL library catalogs. Soon, a number of non-CARL public library catalogs will be available through ACLIN. Many of these are in locations where Regis students do their primary studying. The Colorado Resource Sharing Strategic Planning Committee is attempting to pull all of the statewide resource sharing efforts together into one focussed plan. As a part of this, the Colorado Consortium of Database Networking is working toward a greater access to shared databases statewide.

All of these efforts fuse together to form a solid foundation for extended campus library services. The energies of the extended campus librarian are well-spent in pursuing resource sharing projects that benefit extended campus students statewide.

LIST OF APPENDICES

Appendix #1 - Colorado Resource Sharing Strategic Plan: Goals

Appendix #2 - Colorado Resource Sharing Strategic Plan: Goal 2, Objectives 2.2 and 2.3

Appendix #3 - Colorado Consortium of Database Networking Proposal: Process for Adding Databases to Networks Accessible to Colorado Libraries

Appendix #4 - Colorado Consortium of Database Networking: Charge

Appendix #5 - Colorado Consortium of Database Networking: 1993 Library Survey

Appendix #6 - Selected Survey Results

Appendix #7 - Resources for Further Information

Appendix #1

COLORADO RESOURCE SHARING STRATEGIC PLAN
November 1992

GOALS
(currently not in priority order)

GOAL 1	All Colorado libraries, other information providers, and residents will be encouraged to participate in the Resource Sharing Program.
GOAL 2	The collection resources available to state residents will be preserved, improved, and expanded by optimizing the use of the materials budgets and collections of Colorado libraries.
GOAL 3	A statewide electronic communications structure will be established to support the Resource Sharing Program.
GOAL 4	The number and variety of library holdings available through the Access Colorado Library and Information Network will be expanded.
GOAL 5	An efficient and effective response to the subject requests and reference questions of Colorado residents that can't be filled by the local library will be developed.
GOAL 6	Materials requested by Colorado residents will be provided as quickly as possible.
GOAL 7	Colorado libraries will be appropriately staffed to support the Resource Sharing Program.
GOAL 8	Training through continuing education opportunities that are affordable, accessible geographically, coordinated, and in appropriate formats will be provided to staff of Colorado libraries to support the Resource Sharing Program.
GOAL 9	The costs associated with resource sharing projects, as well as possible funding sources, will be identified.
GOAL 10	A coordinating structure to facilitate resource sharing in Colorado will be established.
GOAL 11	A public relations program for the Resource Sharing Program will be implemented.

Appendix #2

COLORADO RESOURCE SHARING STRATEGIC PLAN

November 1992

GOALS & OBJECTIVES

GOAL 2 **The collection resources available to state residents will be preserved, improved, and expanded by optimizing the use of the materials budgets and collections of Colorado libraries.**

OBJ. 2.2: To create a program to identify, acquire, and make available electronic information products on the Access Colorado Library and Information Network by _____.

Examples of strategies include:

1. Establishing and implementing a mechanism to evaluate shared acquisition of electronic information products and the delivery system(s) for access.
    a. Core reference tools will be identified and provided in online versions on the Access Colorado Library and Information Network.
    b. Non-bibliographic databases, such as image, non-textual, and statistical databases will be identified and provided in online versions on the Access Colorado Library and information Network.

OBJ. 2.3: To provide gateways to information resources external to the Access Colorado Library and Information Network by _____.

Appendix #3

PROPOSAL
10/14/92

COLORADO CONSORTIUM OF DATABASE NETWORKING
Process for Adding Databases
to
Networks Accessible to Colorado Libraries
A Project of the Colorado Resource Sharing Program

We believe there is both value and economy in combining our efforts and resources to add databases to networks accessible to Colorado libraries. There are three basic purposes for this cooperation:

1) To acquire greater assets by increasing the resources available to our patrons
2) To lower the cost and minimize risk for each participating library by consolidating services to libraries and other institutions
3) To improve cooperative relationships and resource sharing throughout Colorado by providing information that can be used by all sizes and types of libraries and other institutions

To this end we propose a structure and process to coordinate and facilitate the addition of informational databases to networks accessible to Colorado libraries.

Structure
A Consortium of Database Networking shall be formed as a part of the Colorado Resource Sharing Program.

This Consortium will involve all facets of the library community through its relationship with the Colorado Resource Sharing Program.

Process
The functions of the Consortium of Database Networking will be to:

1. Establish a Colorado Database Clearinghouse and Communication Network that will:

   - Facilitate exchange of information using a consistent data collection format about potential databases and potential database hosts through selected vehicles such as the Supernet Bulletin Board, CLA Newsletter, State Library Monthly Mailing, or an established mailing list

   - Collect and maintain files of information about possible databases to be mounted and negotiations with vendors and/or database suppliers that have taken place in the past, including discussions of cost

2. Establish a process for adding databases, which will include the following activities:

In general;

- Encourage all libraries and database suppliers (including vendors) to use the Clearinghouse
- Establish general database evaluation criteria
- Establish common basic database supplier service and support criteria
- Advance the Access Colorado Library and Information Network and other network connectivity
- Monitor and evaluate information industry developments and applied technologies in order to determine implications for this program
- Provide, upon request, consultation services to those entities interested in adding databases that have been determined not to have statewide or larger interest
- Determine whether there is a statewide or larger interest for adding a specific database suggested through the Clearinghouse

In cases where an interest in statewide or larger licensing has been identified;

- Determine a host site for databases with statewide or larger interest keeping in mind hardware requirements, storage costs, conversion costs, staffing and access issues
- Be a party to and/or assist in negotiations for database supplier contracts and services (including documentation and training) for selected databases
- Determine criteria for allocating cost or other methods of funding to participating libraries for selected databases
- Survey and evaluate annually database usage under this program
- Survey databases for potential prospects

We are interested in your ideas about this proposal. Please send any comments to: Susan Potter, Regis University Libraries, 3333 Regis Boulevard, Denver, CO 80212. THANK YOU.

Appendix #4

CHARGE

10/14/92

Colorado Consortium of Database Networking

As a committee of the Colorado Resource Sharing Program, it is the charge of the Colorado Consortium of Database Networking to implement the "Process for Adding Databases to Networks Accessible to Colorado Libraries" in order to:

1) Acquire greater assets by increasing the resources available to our patrons,

2) Lower the cost and minimize risk for each participating library by consolidating services to libraries and other institutions and

3) Improve cooperative relationships and resource sharing throughout Colorado by providing information that can be used by all sizes and types of libraries and other institutions.

In this capacity, the Colorado Consortium of Database Networking would report progress and make recommendations to the Colorado Resource Sharing Program.

Appendix #5

1993 LIBRARY SURVEY
Colorado Consortium of Database Networking (CCDN)
Planning Committee

The CCDN was formed to combine efforts and resources to add databases to networks accessible to Colorado libraries. We ask that you assist us in beginning our work by completing the following survey. The data obtained from this survey will be used by the planning committee to determine statewide database needs and communication capabilities. The information is for the use of the committee only. No financial commitment on your part is being made at this time. Tabulated results will maintain library anonymity.

I. GENERAL INFORMATION

Name of person filling out form: ______________________
Title: ______________________
Library: ______________________
Address: ______________________
City: ______________ State: __________ ZIP: __________
Phone #: ______________ FAX #: ______________
Internet Address: ______________________
Library Type: Academic(1) _____ Public(2) _____
School(3) _____ Special(4) _____

II. DATABASE "WISH LISTS"

Please rank 1-5 (with 1 being your first choice) the top five databases that you would want to access through a network in the state of Colorado (such as Access Colorado). **PLEASE DO NOT RANK MORE THAN 5 DATABASES.** You may include those that you currently have in some other form (such as CD-Rom or via DIALOG, BRS, etc.) that you would prefer to access through a network.

___ ABI Inform
___ Agricola
___ Am. Her. Dict.
___ BIP
___ CIA World FB
___ CINAHL
___ Compendex
___ Disclosure
___ Engineer. Ind.
___ ERIC
___ Grolier Encyc.
___ Health Ref. Ctr.
___ Magazine Ind.
___ Medline
___ MLA Bib.
___ Nat. News. Ind.
___ NTIS
___ PDR
___ Psych. Ab.
___ Sci.Cit.
___ Tr. & Ind.
___ US'90 Cen.
___ Wilson
___ World Alm.
___ Other (Please specify - these may be specific databases or topical types of information desired)

__________ __________ __________ __________

III. CLEARINGHOUSE ACCESS

The committee is considering the establishment of a clearinghouse that would facilitate the exchange of information about potential databases and potential database hosts using a consistent data collection format. In addition, this clearinghouse would allow for discussion of negotiations with vendors and/or database suppliers that have taken place in the past, including discussions of cost. In order to determine the best vehicle for this clearinghouse, we ask that you answer questions A and B.

A. Does your library have the equipment/capability to dial remote databases (i.e. a microcomputer, modem, phoneline, and telecommunications software) or are you connected to one of the library computer systems that is or will be part of the ACLIN Network (CARL, MARMOT, UCCS, Weld County, etc.)?

____ Yes(1) ____ No(0)

B. If no, are you planning to acquire this equipment or connection within the next year?

____ Yes(1) ____ No(0)

IV. CURRENT LIBRARY SYSTEMS AND DATABASES

This section is intended to determine what hosting capabilities are currently in existence in the state. Information gathered in this section does not imply a commitment on your part.

A. What library computer system, if any, is currently being used for your library's public access catalog?
(Check only one, OR if none, skip to question V.)

____ ARLIS (Allinson-Ross)(1)
____ CARL(2)
____ DRA(3)
____ DYNIX(4)
____ Follett(5)
____ GEAC/CLSI(6)
____ Sydney(7)
____ Winnebago(8)
____ Other(9)
Please specify ____________

B. Do you manage the library computer system indicated above? ____ Yes(1) ____ No(0)
(If no, skip to question V)

C. Please indicate the databases that currently reside on your library computer system (not CD-Roms). (1)

CHECK AS MANY AS APPLY.

___ Choice
___ ERIC
___ Facts on File
___ Grolier Encyc.
___ Journal Graphics
___ Marcive
___ Medline
___ UnCover

____ IAC (Specify)

____

____

____

____ Wilson (Specify)

____

____

____

______ Other (Please specify)

__________ __________ __________ __________

D. Please indicate the other kinds of information or locally generated databases that currently reside on your computer system. (1) **CHECK AS MANY AS APPLY.**

____ Audio Visual
____ Community Info
____ Education
____ Environmental
____ Gov't. Agency

____ Local History
____ Local Newspaper Indexes
____ Special Collections
(Please specify)
____

____ Other (Please specify)

________________ ________________

V. ADDITIONAL COMMENTS

Please use this space for any additional comments you might have:

____

____

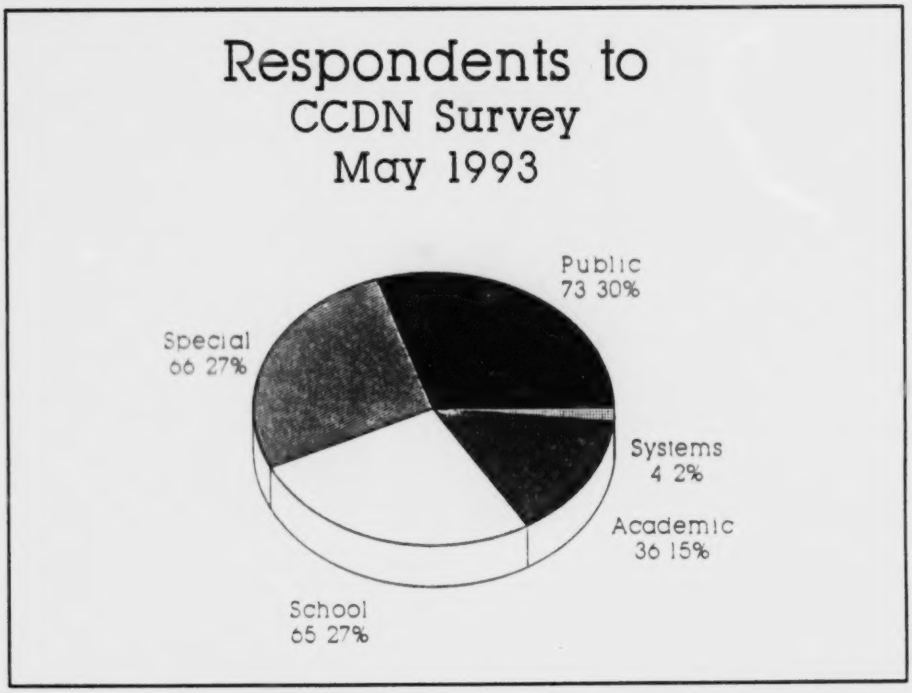
____

PLEASE SEND YOUR COMPLETED SURVEY BY MAY 12TH TO:

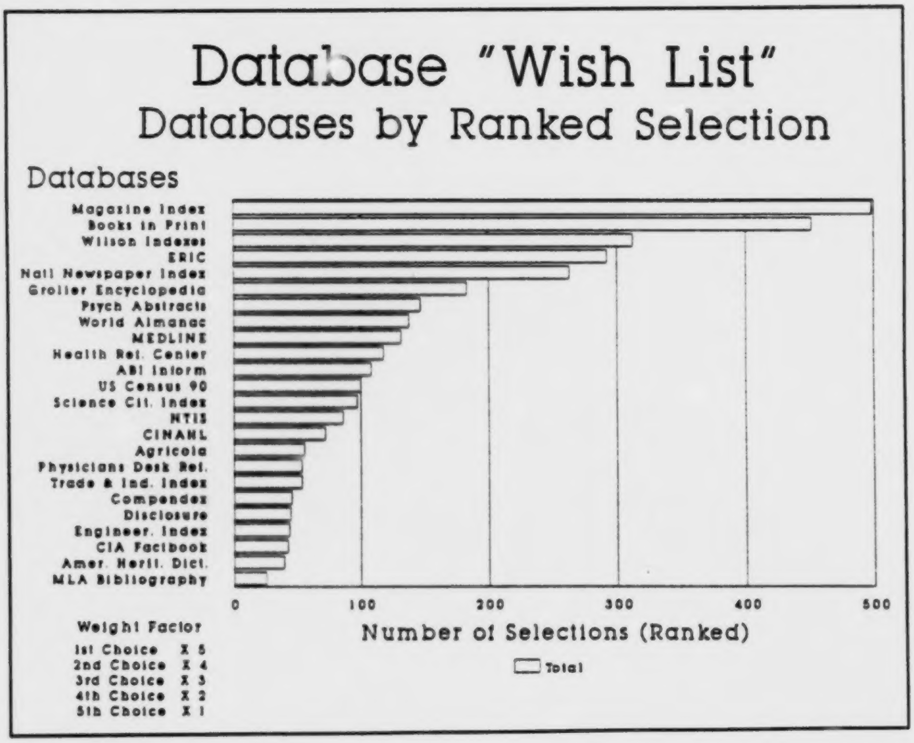
Susan Potter
Assistant Director for Extended Library Services
Dayton Memorial Library
Regis University
3333 Regis Boulevard
Denver, CO 80221
COURIER CODE: CC, Regis University, Denver

QUESTIONS??? Call Susan Potter at (303) 458-4260 or (800) 933-6851

Appendix #6



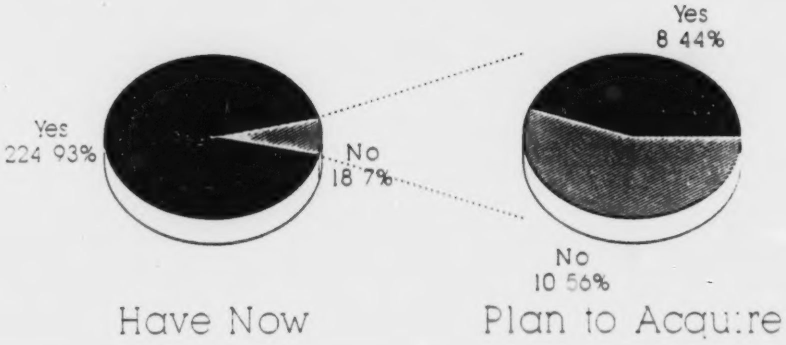
Respondents to
CCDN Survey
May 1993



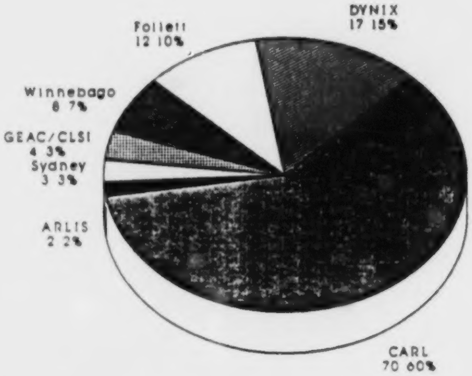
Database "Wish List"
Databases by Ranked Selection

Equipment to Dial Remote Databases

Total Response



Public Access Catalogs by Library Computer System



Appendix #7
RESOURCES FOR FURTHER INFORMATION

Access Colorado Library & Information Network (ACLIN)
Susan Fayad, Sr. Consultant for Network Development
Colorado State Library
201 E. Colfax Avenue
Denver, CO 80203-1704

(303) 866-6907

CARL Systems, Inc. (CSI)
3801 E. Florida Avenue, Suite 300
Denver, CO 80210
(303) 758-3030

Colorado Alliance of Research Libraries (CARL)
3801 E. Florida Avenue, Suite 370
Denver, CO 80210
(303) 758-3030

Colorado Consortium of Database Networking (CCDN)
Susan Potter, Chair
Regis University Libraries
3333 Regis Boulevard
Denver, CO 80221
(303) 458-4260

The Colorado Library Card Program
Katherine Brown
Colorado State Library
201 E. Colfax Avenue
Denver, CO 80203-1704
(303) 866-6908

The Colorado Resource Center
Linda Cumming
Denver Public Library
1357 Broadway
Denver, CO 80203
(303) 640-8800

Resource Sharing Strategic Planning Committee (RSSPC)
James Williams, Chair
University of Colorado
Campus Box 284
Boulder, CO 80309-0184
(303) 492-7511

The UnCover Company
Martha Whittaker, General Manager
3801 E. Florida Avenue, Suite 300
Denver, CO 80210
(303) 758-3030

Bibliography

Bolt, Nancy. "Access Colorado: Vision--Reality--Vision." *Colorado Libraries* 18, no. 2 (1992): 8-9.

Boucher, Virginia. *Library Resource Sharing in Colorado.* Denver: Colorado State Library, 1988.

Brunvand, Amy. "Resource Sharing and the Importance of Place." *Colorado Libraries* 18, no. 2 (1992): 22-24.

Chambers, Joan. "Access vs Ownership: How Far Can We Shift?" *Colorado Libraries* 18, no. 2 (1992): 18-20.

"The Colorado Library Card Program." *Colorado Libraries* 18, no. 2 (1992): 12.

Cumming, Linda. "Resource Sharing--It's an Attitude and a Lot More!" *Colorado Libraries* 18, no. 2 (1992): 13-15.

Fayad, Susan. "Access Colorado: Bridging the Information Gap." *Colorado Libraries* 16, no. 4 (1990): 47-48.

Fayad, Susan. "Update on the Access Colorado Information Network." *Colorado Libraries* 17, no. 4 (1991): 26-28.

Fayad, Susan. "An Overview of Resource Sharing Development in Colorado." *Colorado Libraries* 18, no. 2 (1992): 5-7.

Kroeger, Marie. "Using UnCover (Article Access) in a University Library." *RSR: Reference Services Review* 18, no. 4 (1990): 69-76.

Scott, Sandra. "Cooperative Collection Development: A Resource Sharing Activity for Small Libraries, Too!" *Colorado Libraries* 18, no. 2 (1992): 27-28.

Taber, Sherry. "Resource Sharing: Introduction." *Colorado Libraries* 18, no. 2 (1992): 4.

Ulrich, S. Jane. "The Resource Sharing Game: The Regional Playoffs." *Colorado Libraries* 18, no. 2 (1992): 16-17.

Williams, James F. "The Resource Sharing Strategic Planning Committee: A Long Term Strategy for Colorado Libraries." *Colorado Libraries* 18, no. 2 (1992): 10-11.

Off-Campus Faculty and Students Perceptions of the Library: Are They the Same?

Sr. Margaret Ruddy
Cardinal Stritch College

When faculty members value and use the library, so too, will their students. University and college teachers engaged in full-time teaching in traditional graduate and undergraduate programs frequently use the library for research, classroom preparation and personal growth. They anticipate that their students will do the same. They regularly make assignments that require some library usage, and expect their students to avail themselves of the assistance of the professional library faculty.

In many non-traditional business and management programs, such as the one offered by Cardinal Stritch, the faculty are recruited from the business world rather than from academe. These professionals are selected for their experience and acumen in some particular area of business, whether it be marketing, personnel, accounting, sales or another area, rather than for their advanced degree in a specialized field of study. These faculty do not have the same dependence upon the library as do the traditional faculty. Their point of reference is the business world in which they work all day. These faculty look upon teaching as an opportunity to share their considerable experiential practical expertise with their less experienced, junior colleagues in the business world.

The students that are served by these faculty come from the same milieu, share a common focus and are seeking to complete a degree that will help further themselves in the professional business world in which they already work. Typically, these students have either completed a baccalaureate program and are seeking a higher degree, or else they have stopped out of school much earlier and entered the workplace for one reason or another. Neither the faculty member nor the student is a professional academician, and neither instinctively looks to the academic library as a prime source of information acquisition. Although they are attuned to electronic communication and data retrieval systems, their concept of library services and sources often tends to be in the context of a public library, frequently one which serves a small unsophisticated community. Since both faculty and students are recruited from the same locality, their common experience of a library that has moved into the electronic age is likely to be very limited.

No one will contest the fact that all faculty and students need access to library information and resources. Although this concept may apply in principle, the on-campus population clearly enjoys the advantages and ease of access to these valuable library services much more readily than do their off-campus counterparts. Although the awareness of library resources and services is frequently quite limited among students in remote sites when compared with the on-campus student, there should be no disparity in the quality and quantity of services available to the two groups. This principle of equity has been strongly emphasized in the ACRL *Guidelines*.

PROGRAM DESCRIPTION

When a college moves from a traditional to a non-traditional delivery system for only a portion of its clientele, problems and questions of service availability sometimes arise. This was the case at Cardinal Stritch College when an evaluation of the mission of the Institution brought the realization that a large segment of potential students was not being served.

Cardinal Stritch College is a fully accredited, Catholic liberal arts college located in metropolitan Milwaukee. The College was chartered in 1937 by the State of Wisconsin as a degree-granting institution most of whose students were of traditonal age and seeking a bachelor's degree in some area of the liberal arts.

By 1982, it became apparent that there was a clear need for a non-traditional delivery system to accommodate working adults returning to school after an absence of many years. In response to this need, the College developed and implemented its Programs in Management for Adults (PMA). Designed specifically for the busy schedules of working adults, these programs were enthusiastically embraced and grew rapidly both in variety of curricular offerings and in student population. Courses of study were made available at the main campus in Milwaukee and, subsequently, at the Wisconsin satellite sites of Beloit, Eau Claire and Madison, where a second regional office was established. In 1987, the programs' success led to the expansion of PMA course offerings and the establishment of a third regional office in the Minneapolis-St. Paul area of Minnesota.

Each of the three regional offices is staffed by a Director of Faculty Services, a Director of Student Services and other ancillary support staff. Region One comprises those programs available at the Cardinal Stritch College main facility in suburban Milwaukee. The Region Two office, located in Madison, WI serves the programs offered throughout the rest of the State of Wisconsin. Similarly, the Region Three office is responsible for managing classes available in the State of Minnesota.

Student populations in all three regions is consistently high, with total enrollment in excess of 2100 students. The available curricula lead to a Certificate in Sales and International Business, and the degrees of Associate of Business , Bachelor in Management, Bachelor of Business Administration, and the three Master's degrees in Management, Business Administration and Health Science Administration.

Some of the questions that arise when assessing the role and effectiveness of the academic library in the instruction of non-traditional delivery systems in higher education revolve around differences of perception and expectation on the part of the faculty and students. Some questions that need to be explored include the following: (1) What expectations might the instructors in non-traditional, off-campus programs have for their students' knowledge and use of the library? (2) What perceptions do the students in these programs have of the services that are available to them? (3) What level of satisfaction do these students express with regard to the services that they receive? (4) What expectations might the libraries themselves have of the faculty's understanding of a modern electronic library?

In order to come to some understanding of some of these issues, a survey tool was developed. The remainder of this paper will discuss the development and results of this survey.

SURVEY INSTRUMENT

Shortly after the inception of the non-traditional programs at Stritch in 1983, an attempt was made to ascertain the patterns of library use among this student population. The 1985 survey polled 207 students enrolled at various remote sites and representing programs for the Bachelor of Science in Management, Master of Science in Management and Master of Health Sciences Administration. The results of this survey were presented at the Off-Campus Library Services Conference in Reno, NV in October 1986 . It was found that among the population surveyed, library use for educational purposes was extremely low . The students did not evidence any real perception of the role or need for library resources and services in their educative process.

After a decade of growth and development of the off-campus offerings, it was determined that another assessment analysis of student patronage and perceptions would yield useful information and aid in making library services more readily available and helpful to the academic community. To this end, a second assessment tool was constructed. Unlike the first survey which included only the student populations of the various geographic regions, the new instrument sought to gain some insight into faculty expectations and attitudes as well. The faculty were asked to give their perceptions of the need for library usage by their students in completing the various modules in their curricula.

Using the 1985 survey as a starting point, a second questionnaire was developed . In the very early stages of the planning, the approval and involvement of the Student Services Directors in each region was sought. Their enthusiastic response and support was typical of the cooperation that has always existed between the administrators of the off-campus programs and the library staff. The regional Directors viewed this instrument as an opportunity to raise the awareness of the students at the remote sites to the possibilities of resource availability needed to pursue their programs of study and they welcomed the assurance that these students would have the same library services access as do those students in proximity to the main campus. In order to assure that the tool would meet institutional guidelines and standards, the advice and assistance of the Director of Institutional Research was obtained.

The initial plan was to survey all 2100 students enrolled in the PMA classes during the semester. Because of the prohibitive costs of printing, however, it became evident that it would be necessary to scale back to include only about half of the students enrolled.

During the first week of March in 1993, the survey was sent to the class representatives of the groups selected to complete the survey. In order to randomize the responses and yet obtain information

BEST COPY AVAILABLE

from each facet of the population, the survey was distributed to students according to a pre-determined plan. Those students in Region One who met on Tuesday and Wednesday evenings were invited to participate. Students in Region Two whose classes met on Monday and Wednesday received the survey, and in Region Three, students meeting on Tuesday and Thursday were asked for their opinions. In this way, a representative sampling of students enrolled in each of the PMA programs was given the opportunity to respond to the questionnaire.

The instruments were designed to obtain the most information in the shortest amount of time. The course instructors had been requested by the Director of the Faculty to allow the students ten minutes of class time to complete the survey. The class representatives were directed to distribute the surveys, collect the completed forms and mail or deliver them to their regional office. The Student Services Director of each region had graciously agreed to receive the surveys and forward them to the author. A total of 1288 surveys were distributed in the three regions.

In order to obtain faculty perceptions of the need for library use and instruction as it relates to their courses, a Faculty Library Questionnaire was included with the student surveys. A copy of this tool may be found in the appendix of this paper. In all, a total of 130 faculty surveys were distributed across the three regions.

RESULTS OF FACULTY SURVEY

The response rate of the Faculty Survey was very disappointing. Of the total of 130 surveys sent to the faculty, only 24 (18.5%) were returned. The largest rate of return of 35% (n=20) was from Region Three. The faculty of Region Two responded at a rate of 24% (n=50) and Region One faculty responded with a mere 8.3% (n = 60).

It is difficult to understand the extremely disappointing response rate of the faculty in Region One whose classes are conducted within the immediate vicinity of the College Library. It should not be assumed that these faculty are more aware of the breadth of services available to them and to their students than are the faculty in the remote sites.

There may be several ways this low response rate can be interpreted. It may mean that off-campus faculty are not, themselves, library users, and therefore do not expect their students to be library users. It could also mean that the type of classes they teach do not require the use of a library. This judgment is based on comments from faculty such as: "Algebra is not dependent on library resources" or another "Much of the material for papers comes from students background experiences."

It is interesting to note that of the 24 faculty members who responded, 18 of them believed that PMA students cannot complete their courses without the use of a library. However, when asked if they require their students to use library resources for the modules they teach, only half of the responses were affirmative. The other 50% of the respondents gave confused or contradictory answers. Eight said they do not require library use, two responded ambiguously and one did not respond at all.

Although the faculty response rate was too low to derive any statistically meaningful data, some of the comments warranted a follow-up. Some faculty members requested a "list of sources available" in their subject area. Several others asked for additional information on dial access to the on-line catalog. These questions will be addressed in the faculty newsletter.

STUDENT RESULTS

The response rate of students was somewhat better than that of the faculty, but did not meet expectations. Because of the method of distribution, it was expected that there would be almost 100% participation even after allowing for absences.

Students were asked to complete the short survey in class and return it to the class representative immediately. Apparently this did not happen, and many students took the surveys home with them. If they were returned at all, there was no way of identifying the classes from which they came since they had not been coded prior to their distribution. Although the students were asked to identify the programs in which they were enrolled, it happened that several other groups of students in the same program met on their particular night.

In order to retrieve as many of the surveys as possible, a notice was printed in the April student newsletter asking for their return, but the response was not very great. Of the 1288 surveys distributed, a total of 510 (39.5%) were returned from the three regions.

The survey , a copy of which is found in the appendix, was composed of 24 questions. There seemed to be considerably more interest in responding to some questions than to others. Only those areas that might be of interest to persons involved in off-campus programs will be examined here.

Students emphatically believe that the use of the library is necessary for success in their academic program with affirmative responses exceeding 85% in all regions. Comments such as "Absolutely" and "Without a doubt" reinforce their agreement with this item. The types of services they seek in libraries are summarized in Table I.

Table I. Services Used In Libraries

Service	**Region One (n=202)**	**Region Two (n=175)**	**Region Three (n=96)**
Reference	81.1%	78.8%	85.4%
Interlibrary loan	13.3%	22.2%	34.3%
Checkout books	77.2%	74.8%	78.1%
Study	45.5%	30.2%	43.7%
Copy machines	44.0%	33.7%	47.9%
InfoTrac/Electronic Indexes	57.4%	33.1%	35.4%

The students were asked to identify the type of library used most frequently to find materials for papers, assignment and reports. While the students used more than one library type,the library most frequently used was the public library (Table II). The majority of students in each region seem to be satisfied with the reference materials they find in these local libraries.

Table II. Types of Libraries Used for completion of assignments as reported by students in the three regions of PMA

Type of Library	Region One (n=221)	Region Two (n=194)	Region Three (n=93)
Public library	54.3%	91.2%	68.8%
Academic	49.3%	33.0%	35.4%
Special library	4.5%	8.8%	28.1%
Corporate	9.5%	13.4%	27.0%
Personal	6.3%	12.9%	9.4%
None	2.3%	2.1%	2.2%

There is general agreement among college level educators that public libraries do not contain sufficient resources to support an academic curriculum. The public library does not have an educational mission in the same sense as that of an academic library whose major reason for existence is to support the curriculum. There is cause for concern that college students believe that public libraries can meet their need for materials and services in completing their class assignments.

The question seeking information on frequency of use of any library and the time of use showed that students of all three regions utilize the library only once a month. Not surprisingly, the most preferred times of usage were on Saturday or Sunday between 8 am to 5 pm. and on Monday to Thursday evenings between 5 and 10 pm.

This use pattern was noted with interest. In Region One where more students have access to the main campus, one of the most frequently made suggestions and one of the greatest criticisms of the library regard the hours of service. If the information gleaned from this survey is reliable, this complaint is without any real basis. It would seem that only a very few students would use the library beyond the current 10 pm closing time, and that the hours that the library is open are also those preferred by the majority of students.

Cardinal Stritch College offers a full range of services to students at the remote sites. These include:

○ Toll-free telephone number
○ Access to research and reference services via phone
○ Mail, phone, fax requests accepted
○ Document delivery via first class mail
○ On-site library instruction by a librarian
○ Printed library guide
○ Dial access to on-line catalog
○ Marking of bibliographic items in on-line catalog for delivery to home
○ Voice mail to leave requests
○ Computer and CD-ROM searches
○ Renewal of books by phone
○ Photocopy services for journal articles
○ Interlibrary loan

It should be pointed out that each class is given a basic orientation and most receive formal library research instruction presented by a professional librarian. This service is not restricted to the classes offered in Region One, but extends to the other two regions where the librarian travels to the remote site for the instruction. The library night is scheduled after the completion of the first module of the program. This is six weeks into the program and is scheduled early to insure that the students will have the skills necessary to do their assignments with confidence and ease. In the library module, the librarian discusses library services, resources and research strategies. Students in Region One have the added advantage of library instruction at the main campus library where they can actually practice using the technology on site with the librarian at their elbow.

Most survey respondents admitted to having been informed of the library services and that they had received a Library Guide. There were striking regional differences in their perceptions of the value of the Guide, however. The data seem to indicate that the greater the geographic distance between the students and the campus library, the less useful they perceived the Guide to be. One might interpret this to mean that the students in Regions Two and Three look upon the Library Guide as being specific to the Cardinal Stritch library and without application in any other library. Table III summarizes the students' view of the Library Guide.

The presentation by the librarian received mixed reviews. Some students claimed not to have received a library presentation by a librarian or did not find it useful. It is possible that some of the students who responded had not come to the stage of their programs where the library instruction is given. Some students were probably absent and a few claimed that they already "knew it all." Table IV summarizes the responses given as to the relevancy of the library presentation.

Table III. Student perceptions of the usefulness of the Library Guide in doing their assignments (%).

	Region One (n=201)	Region Two (n=170)	Region Three (n=93)
Very helpful	16.9	5.3	3.2
Satisfactory	33.8	24.7	13.9
Unsatisfactory	3.4	2.9	5.4
Useless	2.0	4.7	18.2
Have never seen it	10.0	8.8	15.6
Seen but never used	32.8	53.5	43.0

Table IV. Students' opinion of the relevance of the Library Module (%)

	Region One (n=202)	Region Two (n=166)	Region Three (n=96)
Received library presentation			
Yes	71.2	66.8	72.9
No	28.7	33.1	22.9
Class presentation was:			
Very useful	32.0	25.2	1.0
Somewhat useful	54.9	57.1	38.6
Not useful	13.0	17.6	31.2
Importance of library instruction			
Important	58.2	42.5	30.4
Somewhat	25.3	25.0	30.4
Unnecessary	21.6	32.5	34.8

Those students who found the class presentation by the librarian of benefit were high in their praise. They stated that this instruction updated some of their skills that were not used for a long time. On the other hand, those who did not find it helpful gave many reasons for their negative responses. Some students claimed that they had learned all "that stuff" before and had no need to hear it again. Another comment frequently voiced was that it was held "too early in the program." It is unclear whether this is said because the students fear they will not be able to remember all of the information that is given them on that night, or whether they simply do not wish to be burdened with information that they feel is not of immediate utility. In fact, more than a fourth of the students did not think it was necessary to have library instruction at all. Despite negative comments the majority of the students clearly believe that the library night should be continued.

CONCLUSIONS

It is difficult to draw any definite conclusions from this study. In fact, it seems to raise more questions that it answers. We have a student population who claims to need the library to complete assignments but admit that they do not use it regularly. A large portion of the students do not consider library instruction important, but still think it should be continued. It would seem that , although the faculty profess a need for extensive library use, their assignments do not reflect this need. It maybe, as a number of students and some faculty indicated, that the researach required for assignments comes from experience rather than academic research.

Where does this leave the library? We know that students will use the library when they need to. 88.7% of students from all three regions who had received help from the library rated this assistance as useful. The overall impression of services offered by Cardinal Stritch Library was found to be excellent to good by 93.2% of the population responding. This high figure can be misleading since much of this satisfaction comes from those students in closer proximity to the library.

We have conflicting perceptions of the library. It may be that these perceptions are never going to be changed. Does this mean we abandon our attempts to service these students? NO. We must remember that our perceptions of what faculty and students need and want are not always the same as those of librarians. We find this dichotomy frustrating and unsettling. We will never satisfy every student or faculty member. We can, however, continue to give them the best and most varied services possible. We can attempt to understand their perceptions and work to change them by communicating our services and aggressively marketing them. Service as our mission. We take seriously our role in providing it.

CARDINAL STRITCH COLLEGE

FACULTY LIBRARY QUESTIONNAIRE

While your students are completing the Library Questionnaire, would you be so kind as to answer these few questions. Please include your completed questionnaire with those of your students. Thank you for your cooperation and participation.

Should working adult students be required to use an academic or professional library (i.e., a library which has professional reference services and professional journals appropriate to the content of the module being taught) to complete their assignments?

a) Yes b) No

Comments:______________________________

____

____

Can students in the PMA program complete their courses without the use of a library?

a) Yes b) No

Do you require your students to use library resources for the modules you teach?

a) Yes b) No

Comments:______________________________

____

____

____

What do you need to know about Cardinal Stritch Library in order to help your students stay informed?

____

____

____

6801 North Yates Road ○ Milwaukee, Wisconsin 53217 ○ (414) 352-5400 Fax (414) 351-7516

CARDINAL STRITCH COLLEGE

STUDENT LIBRARY USE QUESTIONNAIRE

So we can provide you with the best Library services possible, please take a moment to complete this questionnaire. The Library Staff asks that you complete and return this questionnaire in class today. Thank you very much for your responses.

Please circle your age group and your sex.

a) 23-26 b) 27-35 c) 36-39 d) 40-45 e) 46-49 f) 50-55 g) 56+

a) Male b) Female

Please circle the item which best describes you.

a) Working full time b) Working part time c) Unemployed d) Retired

e) Other____________________

In what program are you enrolled?

a) Certificate b) ASB c) BSBA d) BSM e) MSM f) MSH

g) MBA h) CMBA i) GWY

Where do you attend classes?

City____________________ State____________________

Please circle the response which best describes your situation.

1. **How many modules have you completed in the PMA Program?**

   a) First b) 2-4 c) 5-7 d) 8-10

2. **How many of your PMA modules have required the preparation of papers, reports, and presentations?**

   a) None b) 1-3 c) 4-6 d) 7-9 e) All

3. **How many of your papers, reports or presentations have required the use of an academic or special library (not a public library)?**

   a) None b) 1-3 c) 4-6 d) 7-9 e) All

4. **Which of the following types of libraries do you use MOST to find materials for papers, reports, and presentations.**

a) Local public library (Please name)______________________________

b) Local academic library (Please name)___________________________

c) Special library (hospital, law, etc.) (Please name)____________________

d) Corporate library at work (Please name)_________________________

e) Personal library

f) None of the above. WHY?____________________________________

5. **Are you satisfied with the reference materials you find in these libraries?**

a) Yes b) No

6. **How would you rate your library skills?**

a) superior b) good c) average d) have some problems e) poor

7. **Do you think the use of a library is necessary for academic success in the PMA program?**

a) Yes b) No c) Maybe If No or Maybe, please explain____________

____

8. **How often do you use a library for PMA course work?**

a) daily b) weekly c) monthly d) seldom e) never

9. **Circle the time of day are you MOST LIKELY to use any library?**

a) 8 a.m.-Noon b) Noon-5 p.m. c) 5 p.m.-10 p.m. d) after 10 p.m.

10. **Circle the day of the week are you MOST LIKELY to use any library?**

a) Sunday b) Monday c) Tuesday d) Wednesday

e) Thursday f) Friday g) Saturday

11. **How far do you live from the nearest library?**

a) less than one mile b) 1-5 miles c) 6-10 miles d) 11-20+ miles

12. **Do you use this library? (Referred to in Question 11)**

a) Yes b) No If No, why not ___________________________

____

13. **What services do you use in libraries? (Circle all that apply)**

a) Reference assistance b) Interlibrary loan c) Check out books

d) Examine Thesis/Research Projects e) Study -- Individual or group

f) Copy machines g) InfoTrac or other electronic indexes

h) Other ____________________

14. **Do you receive the necessary assistance to complete your research at the libraries you use?**

a) always b) most of the time c) sometimes d) hardly ever e) never

15. **Were you informed about Cardinal Stritch College Library services?**

a) Yes b) No

16. **How helpful is the Library Guide in preparing your assignments?**

a) very helpful b) satisfactory c) unsatisfactory d) useless

e) have never seen it f) have seen it but never used it

17. **Did you receive a class presentation on the library by a librarian?**

a) Yes b) No

18. **How relevant and useful was the class presentation?**

a) Very b) Not at all c)Somewhat If No or Somewhat, please explain

____

19. **Is a class presentation on library use important for your research needs?**

a) Yes b) No c) Somewhat If No or Somewhat, please explain.

____

20. **Should it be continued?**

a) Yes b) No

21 **How satisfied are you with the access you have to Cardinal Stritch College Library?**

a) Very b) Somewhat c) Not at all If **c**, why not____________________

____

22. **Have you used the Cardinal Stritch College Library?**

a) Yes b) No

22. **If you have used the Cardinal Stritch College Library was the assistance useful and helpful?**

a) very useful b) somewhat useful c) not helpful

d) useless e) does not apply have never used

24. **What is your overall impression of the services offered by Cardinal Stritch Library?**

a) excellent b) good c) fair d) poor e) unaware of any

25. **What suggestions or comments do you have about library services or additional services that should be available to PMA students.**

PLEASE RETURN THIS QUESTIONNAIRE TO YOUR CLASS REP.
THANK YOU FOR YOUR COOPERATION.

January 1993

When Separate Is Not Equal: Improving Library Services at Satellite Campuses Via Networking

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Networking is not a new concept to libraries, but it is of increasing importance in times of financial hardship. Rather than seeing resource sharing as an extra or external aspect of their operations, many libraries realize that cooperation with other institutions becomes even more vital as resources grow scarcer.

In California, a statewide Networking Task Force has been working for several years to develop new legislation, policies and funding sources to support cooperative activities between all types of libraries. A number of major steps have occurred in the planning process. In 1989, the library community identified what it was that a statewide multitype network should do for the people of California. Policy directions, structure, and administration were discussed over the next three years. The fourth and final planning phase began in 1992, involving service priorities, funding allocations, and legislative approaches. The future timeline calls for legislation to be introduced in the 1994/1995 session (California Library Networking Task Force 1992). Meanwhile, sharing of resources and services, on both a formal and informal basis, is occurring throughout the state.

How does the branch or satellite campus library fit into the networking process? What types of activities and opportunities does networking provide for increasing the quality of library services to off-campus students? Even in the age of electronic technology, the branch campus library may tend to be isolated both from the main campus library and from the wider world of librarianship. Participation in library networks, whether formal or less structured, can definitely ease this sense of separation while enhancing the resources and services available to students and faculty.

SJSU MONTEREY COUNTY CAMPUS

The Monterey County Campus of San Jose State University was established in Salinas, California in 1990, offering a range of upper-division and graduate courses to a culturally diverse population of students in a three-county area. Located 65 miles from the main campus in San Jose, the Monterey County Campus (MCC) attracted approximately 1,000 students whose previous alternatives for a baccalaureate or graduate degree locally included commuting, attending a private university, or taking correspondence courses.

When planning library services for the new campus, San Jose State administrators surveyed the literature, attended the 1986 Off-Campus Library Services Conference, and visited other off-campus centers in the state. It was decided that a small library staffed by a professional would best meet local needs, rather than having an extension librarian working out of the main campus collection.

The MCC Library now contains a 2,000-volume reference collection with subject strengths in Education, Psychology and Business, 120 journal subscriptions, and six computer workstations used for dialup access to the main library's online catalog, and/or for CD-ROM reference sources such as ERIC and PsycLIT. Due to space and budget limitations, there is no circulating collection; document delivery from the main campus (Clark Library) collection is accomplished fairly quickly through telefax and daily UPS delivery.

However, because of the campus' geographically isolated situation and the varying research needs of Liberal Studies, Education, Business, Psychology and Social Work students, even a smoothly-functioning arrangement with the main library was not fully adequate to serve MCC students. Accordingly, several cooperative arrangements were developed with local libraries.

ACADEMIC LIBRARY COOPERATION

The first of these was with Hartnell College, a two-year community college in Salinas. For a number of years before the opening of Monterey County Campus, SJSU continuing education staff had office space at Hartnell, and the college was a reception site for televised courses from San Jose. Thus informal cooperation between the two institutions' libraries had already occurred, and continuing activities were formalized with a Memorandum of Understanding and Reciprocal Borrowing Agreement (Appendixes A & B).

This agreement provided mutual borrowing privileges and reference service, which has proved beneficial to both groups of students. MCC undergraduates in the Liberal Studies program have direct, immediate access to a circulating collection with strengths in literature and the humanities, and a more comprehensive journal collection than MCC can carry. Conversely, Hartnell students and faculty may use ERIC and other CD-ROM databases at MCC, and have indirect access to the larger holdings of SJSU Libraries.

PUBLIC LIBRARY COOPERATION

Arrangements with John Steinbeck Library, a large public library in Salinas, are much looser, having arisen from several working lunches with the Head of Reference. Through verbal agreements, each library will extend special efforts to provide reference assistance to the other's clientele. The MCC Librarian will alert Steinbeck Library reference staff when a class assignment may result in heavy use of the public library collection.

This arrangement has proved particularly useful to our undergraduate Liberal Studies students, whose coursework may range from California History to Music in America to Autobiography as Literature. In the case of a Children's Literature class, the students were even provided with bibliographic instruction by the Children's Librarian at the public library, via a tour and discussion of their reference sources. In return, public library patrons are welcome to use the resources at the MCC Library; though they do not have university borrowing privileges, they may locate citations to books and articles which can later be obtained through interlibrary loan at their home library.

Another group of students to receive particular benefits from this cooperative effort are the undergraduates in the Business program. While some classes, such as Accounting, do not require a great deal of library support, others in the Marketing and Management programs do need access to business resources beyond the two shelves of reference materials and 5-10 journals MCC is able to provide. The Steinbeck Library's business collection, though it has suffered somewhat from continuing budget cuts, is still one of the largest business resources in the tricounty area. Here our students have access to *Business Index* (Infotrac), and may print out relevant articles from the accompanying full-text resource, *Business Collection*.

REGIONAL MULTITYPE NETWORK

In 1991 the Monterey County Campus Library became a networking member of the Monterey Bay Area Cooperative Library System (MOBAC). MOBAC was formed in 1969 as a public library cooperative for Santa Cruz and Monterey Counties. By the 1980s it grew to include academic and special libraries as equal members in the organization. MOBAC now encompasses San Benito County as well and is composed of eight public libraries, eight academic and school libraries, three government libraries, and two special libraries (Figure 1).

MOBAC's mission is to foster resource sharing activities among the cooperative; services provided include interlibrary loan and reference referral, interlibrary delivery, continuing education, and publications and products such as a printed Union List of Periodicals, and a CD-ROM based union catalog.

The MOBAC member libraries vary greatly in size and funding level. Though not all library cooperatives have welcomed multitype libraries (particularly smaller ones) as members, MOBAC has always focused on the potential for strengthening resources rather than draining them. Bylaws and fees of the organization have been worked out to accommodate libraries with widely divergent resources and budgets. Public and non-public libraries were given equal voting power on the MOBAC Administrative Council (except for budget issues related to the California Library Services Act, which governs public library systems). Also, representatives from any library may participate in the myriad of committees supporting MOBAC services. Consequently, all member libraries are encouraged to participate on a variety of levels (Manke 1993).

This acceptance of all members as valuable, contributing participants sets the tone for a truly cooperative effort whose services benefit all. In advocating multitype library cooperation, Hugh Atkinson (1987) said it well: "It is not necessary for the outcomes, products and uses of networks to be the results of an equal system, but rather that the network be valuable to each of its participants" (432). The benefits considered most valuable by each MOBAC library may differ, but each

FIGURE 1. MONTEREY BAY AREA COOPERATIVE LIBRARY SYSTEM (MOBAC)

PUBLIC LIBRARIES

Harrison Memorial Library (Carmel)
Monterey County Free Libraries
Pacific Grove Public Library
Salinas Public Library
San Benito County Free Library
San Juan Bautista City Library
Santa Cruz City/County Library
Watsonville Public Library

ACADEMIC & SCHOOL LIBRARIES

Cabrillo College Library
Gavilan College Library
Hartnell College Library
Monterey Institute of International Studies Library
Monterey Peninsula College Library
Monterey Peninsula Unified School District,
    Instructional Media Center
San Jose State University,
    Monterey County Campus Library
University of California at Santa Cruz,
    McHenry Library

GOVERNMENT LIBRARIES

Fort Ord Library System
Naval Postgraduate School Library
TEXCOM Experimentation Center,
    Technical Information Center

MEDICAL LIBRARIES

Community Hospital of the Monterey Peninsula,
    Medical Staff Library

MUSEUM LIBRARIES

Monterey Bay Aquarium Library

recognizes the importance of MOBAC's cooperative efforts. This has allowed large and small libraries to work together for the benefit of the group.

As a small academic branch library, what has the Monterey County Campus Library gained from participation in the MOBAC network, and what has MCC contributed in return? Examples are most notable in the areas of reference service and continuing education. The MCC Librarian is a member of the MOBAC Reference Committee, which meets monthly to discuss policies and practices concerning improvement of reference service throughout the system. In the past few years, the Reference Committee has sponsored workshops on the 1990 Census, business reference sources, and multicultural reference resources. As both attendee and presenter at these sessions, the MCC Librarian has added to her professional skills and knowledge of available resources.

Another cooperative project in which MCC staff participated was the compilation of a systemwide Union List of Public Access CD-ROM Products (MOBAC 1992). Containing 45 titles available at 16 member libraries, the publication is a resource for patron referral as well as an aid in evaluation and acquisition of CD-ROM reference sources. During 1992-93, the MOBAC Reference Committee visited several member libraries, including the MCC Library, for demonstrations of various CD-ROM products. There were also many productive discussions concerning CD-ROM access, use policies, impact of full-text databases, etc.

MCC Library has also utilized MOBAC for reference referral, interlibrary loan and document delivery. By far, our greatest backup for these services is the SJSU Clark Library, but there are times when it is quicker or more feasible to obtain materials or information from a local source.

One of the more intangible benefits of networking is the "communication connection"--the professional awareness and growth which results from participation in MOBAC Administrative Council and Reference Committee meetings. Just as weekly meetings at the main library enhance the branch librarian's knowledge of librarywide and university-related matters, so the monthly meetings with local colleagues widen awareness of regional and statewide library activities. The other consortium members also benefit by the affiliation with SJSU, a large academic library from a more urban area.

In the Monterey County Campus Library's three years of existence, there have been remarkably few problems with our networking relationships, apart from some early misunderstandings when SJSU students were denied service by Hartnell Library staff who were unaware of the agreement. This success can be attributed to ongoing communication, as well as a good cooperative foundation; we were fortunate that the Monterey Bay region has a long history of library networking.

At the time our first networking agreement was drafted, there were few guidelines for the satellite campus librarian on how to formalize interlibrary cooperation. In the past few years, however, several authors have effectively discussed the subject of contracts for cooperative activities (Dollerschell 1991; Scrimgeour & Potter 1991).

LOOKING BEYOND THE LOCAL NETWORK

There are, of course, opportunities for the branch campus librarian to participate in national or international networks. The Extended Campus Library Services Section (ECLSS) of the Association of College and Research Libraries (ACRL), a division of the American Library Association, was organized only two years ago, but in early 1993 had grown to over 500 members (Power 1992/93). At the 1993 ALA annual conference, ACRL/ECLSS sponsored a program on "Working with the Adult Learner in Academic and Public Libraries," stressing collaboration between public and academic libraries. The theme of the ECLSS program at the 1994 ALA conference will be "Networking--Sharing Resources to Enrich Librarians and Library Services." ECLSS has many committees and encourages active participation.

For librarians who are unable to travel to annual conferences or serve on committees, but would like regular contact with their counterparts in other institutions, there is an "electronic discussion" list server, Off-Campus Library Services E-Conference, moderated by Barton Lessin (e-mail address for this service is OFFCAMP@WAYNEST1.BITNET). Here librarians concerned with distance education may pose questions, discuss topics of interest, or disseminate information to colleagues electronically.

CONCLUSION

The very term "satellite campus library" evokes an image of remote isolation, but the librarian in an extended campus setting need not feel alone, or that small size must lead to inferior service. The potential disadvantages of the situation may be overcome through appropriate networking with others. The availability of established library networks will vary by location. If none exists, the branch campus librarian can still encourage cooperative efforts with other local libraries, and work to develop more formal resource sharing arrangements.

Participation in a network may involve time, effort, and some financial obligation. It may also involve initiative and a certain amount of risk-taking for the librarian. Hughes (1989) encourages librarians to be innovators, to see the entrepreneurial opportunities in networking. Available services and resources should be continually evaluated and change initiated, if necessary, to meet the mission of the library and its institution. She notes that "the dynamic of taking strategic risks is critical to a library's ability to remain vital" (128).

As the Monterey County Campus Library has experienced, even the smallest off-campus library operation can improve its service level through networking. The personal and professional benefits which come from expanding your patrons' access to information will be well worth the effort.

Appendix A

MEMORANDUM OF UNDERSTANDING

HARTNELL COLLEGE LIBRARY AND SAN JOSE STATE UNIVERSITY

This agreement was drafted by Esta Lee Albright and John Totten of Hartnell College and Rebecca Martin and Donna Ziel of San Jose State University in September 1989. It was adopted after review by both Libraries in October 1989.

In recognition of the mutual educational goals of Hartnell College and San Jose State University in relation to the citizens of Monterey County, and in light of the establishment of the San Jose State University Monterey County Center, the Libraries of these two institutions agree to provide the following reciprocal services to the students of each institution. As the SJSU Monterey County Center Library develops, we expect that this relationship will be strengthened.

1. Borrowing Privileges

Upon presentation of clearly identifiable campus identification with expiration date, each library agrees to provide students with borrowing privileges by entering them into automated circulation systems and/or providing them with local borrowing cards. Alternative arrangements for identification of qualified borrowers may be made by mutual agreement between the two libraries. SJSU borrowing privileges for Hartnell students will be at the San Jose campus only, since the Monterey County Center Library will have very limited circulating collections.

2. Reference Service

Within the limits of staffing and collections, and in a manner that does not detract from the service available to the library's own students, the Hartnell Library and the SJSU Monterey County Center Library agree to provide reference service and on-site collection use to students of both institutions. Cooperation in the development of reference collections will be explored.

3. Overdue Materials

In order to provide for the timely retrieval of overdue books, each library agrees to take action against their own students who have long overdue materials from the other library. These measures may include registration blocks and holds on grades. Complaints resulting from these measures will be handled by the library of the student's institution. Details on exact procedures will be developed through mutual agreement by both libraries.

Communication is an essential part of this agreement. These arrangements will be reviewed by the Libraries on an annual basis to ensure that undue hardship is not created for either library through excessive use by students from the other institution.

Appendix B

Reciprocal Borrowing Agreement
Hartnell College Library and Clark Library, SJSU

An agreement has been made between SJSU Library and Hartnell College Library to extend reciprocal library privileges to the students currently enrolled in each institution. Circulation privileges in Hartnell College Library will be given to currently enrolled SJSU students:

1. (a) Upon completion of a standard form at Hartnell College Library's circulation desk,
   (b) Upon presentation of a clearly identifiable campus I.D. card with an expiration date or semester sticker on it, Or,
   (c) Upon presentation of the semester sticker and a photo I.D.

2. SJSU student data will be entered into the circulation system and students will be accorded borrowers privileges during the time period they are actively enrolled in SJSU classes and remain borrowers in good standing in the Hartnell Library's circulation system.

3. SJSU students will be subject to the same loan periods, recalls, and overdue procedures that Hartnell students follow, i.e. the following:

   (a) An overdue notice will be sent to the patron after an item has been overdue 7 days.
   (b) A second overdue notice, which is a bill, will be sent to the patron after an item is overdue 21 days. The amount of the bill will be the cost of the item plus $5.00 processing fee. At that time, the patron will be blocked from circulation privileges.
   (c) Hartnell College Library circulation staff will notify the SJSU Center in Salinas that a patron from SJSU is delinquent. In the case that the student is a member of the satellite campus, the Center has indicated willingness to help contact the student.
   (d) Approximately 30 days after the bill has been sent, or at the end of the current SJSU term, a statement will be sent to the SJSU Library requesting a "hold" be placed on a student's records. A copy of the bill sent to the patron will accompany the request.
   (e) Hartnell College Library will notify SJSU Library of resolved or revised record hold requests as they occur.
   (f) Once a year, during January, Hartnell College Library will notify and bill SJSU Library for all outstanding material as described in the hold requests made during the previous year. The bill will include the following information: students' names, social security numbers, individual amounts owed, and the dates Hartnell requested holds be placed on the students' records.
   (g) Refund policy: Refunds will be processed for patrons who have paid bills for overdue items if the items are returned before the titles are replaced in the collection.

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Funding Off-Campus Library Services Through Alternative Sources: Expanding the Infrastructure to Include Fee-Paying Clients

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INTRODUCTION

At the University of Victoria (UVic), the early 1990s have been a period of rapid growth and development in the delivery of library services to off-campus populations. The UVic Division of University Extension established a service unit in 1980 to provide library support for its students who were engaged in course work or independent study at locations outside the Greater Victoria area. Since the beginning, the unit has been funded entirely by the Division of University Extension and based in the main Library. While the service unit was nameless in its first year of operation, the unit later came to be known as Extension Library Services.

Since 1980, Extension Library Services has grown considerably in terms of staff, clientele, space, and resources. The unit started out with two part-time positions and two desks crowded into a corner of the Circulation Division work area. The nearest photocopier was two floors away and had to be shared with students. Thirteen years later, there are four full-time staff members, one part-time staff member, and one temporary employee. Extension Library Services has its own office area on the second floor of the main Library, complete with its own storage room and copy center containing a high-speed photocopier and fax machine.

While enhancements did occur in the service unit throughout the 1980s, the major changes that occurred in recent years were a result of a decision in 1990 to expand UVic's model of off-campus library service to include non-university clients. Extension Library Services had developed a reputation for providing fast and effective delivery of information and materials to students at remote locations. The Director of University Extension at that time believed that the same model of service could be provided equally well to organizations, institutions, and individuals not affiliated with the University. Since University funding was becoming increasingly limited in all areas, this service expansion initiative was seen by the Director as a means to bring in external revenue to offset the rising costs of providing library services to students at a distance.

Through a combination of initiative and happenstance, Extension Library Services was able to enter into formal arrangements with two major external clients. The contract developed with one client resulted in a major expansion that included staff, space, and resources. This paper will outline the nature and funding of off-campus library services at the University of Victoria, describe the development of fee-based library services, explain the advantages derived from the arrangements with external clients, and discuss the current model of service.

UVIC OFF-CAMPUS PROGRAMS

Throughout the 1970s, UVic offered a select number of general arts courses at various locations in British Columbia. The courses used classroom space in local schools and colleges since the University did not establish any remote centers or extended campuses. Library support for these courses was limited to the provision of small core collections which were sent on temporary loan to the course site from the main campus.

Three major changes occurred in UVic's off-campus programs in the early 1980s. First, off-campus general arts courses were discontinued and course delivery was concentrated in the professional fields of education, nursing, social work, public sector management, and child and youth care. Second, at approximately the same time there was a change in program delivery. The emphasis of the University for undergraduate off-campus education shifted from classroom-based courses to courses delivered through distance education methods. These methods involved the use of independent study packages which were often supplemented by one or more of the following: educational television broadcasts, audio-conferences, videotapes, and audiotapes.

The third major change was the introduction of several off-campus graduate programs offered by the Faculty of Education. Each program was scheduled to run for two years and as many as four programs have run concurrently. The areas of concentration in these programs included educational administration, counseling, language arts, and curriculum studies. The programs were offered in specific regions of the province and classes were held in school or college classrooms in a centralized town in the area. Students would commute from nearby towns to attend classes on weekends.

These three changes had significant implications for library services. Very few community colleges in British Columbia have extensive library holdings in the professional fields mentioned above. The shift to course delivery by distance education methods meant that the provision of core collections could no longer be the primary means of library support for UVic's off-campus courses (Slade 1987). The graduate students in the two-year programs required higher level library materials than could be provided through either local libraries or core collections from campus. As a result of these factors, Extension Library Services came into existence to provide enhanced library support for all off-campus programs offered by the University of Victoria.

THE INFOLINE LIBRARY SERVICE

The early history of off-campus library services at the University of Victoria has been described in another paper (Slade, Whitehead, Piovesan, & Webb 1987) and will not be repeated here. The initial mandate of Extension Library Services was to deliver library materials to students registered in off-campus and distance education courses sponsored by the Division of University Extension. That mandate has been fulfilled to the present through a service known as INFOLINE.

Since many of UVic's off-campus students are decentralized and study independently using distance education course materials, the options for developing library collections at local centers are very limited. The three major universities in British Columbia are concentrated on the coast and students in other parts of the province often do not have access to appropriate library resources in their local communities. As a result, Extension Library Services has assumed full responsibility for providing all necessary library support through the INFOLINE service.

The original concept of INFOLINE centered around a toll-free telephone line with a special number which off-campus students could call whenever they required library materials for course purposes. While the telephone still is the nucleus of the INFOLINE service, the means of access have been expanded over the years to include regular mail, fax transmissions, and, more recently, electronic mail. All UVic off-campus students are provided with either handouts or information printed into their study materials to inform them about how to use the service.

If the students choose to use the toll-free telephone line, they are connected to an answering machine. The students are then instructed to list the library material that they require or to describe the type of information needed for course purposes. A library assistant in Extension Library Services transcribes the telephone messages each working day. Students are only called back if there is a query about their requests. The requests for specific titles are handled by a library assistant and requests for reference assistance or literature searches are passed on to a librarian. The staff attempt to provide a forty-eight hour turnaround time for all requests.

Any circulating book in the UVic Libraries can be loaned to off-campus students. Recalls are placed for any material which is in use when requested. Loan periods are the same as those given to on-campus students. Extension Library Services also has a large office collection of uncatalogued materials, including many duplicate copies of books, articles, and audio-visual items designated as supplementary material for the various off-campus courses. Items from this office collection are sent on short term loan to individual off-campus students as required.

Periodical articles are copied on demand for off-campus students from the library collections. Interlibrary loan requests are placed on behalf of the students when necessary. In response to requests for reference or subject assistance, literature searches are conducted using the appropriate CD-ROM or online databases. Due to the short deadlines in most undergraduate courses, the librarian usually selects material from the search results to be sent to the off-campus students. At the graduate level, printouts from the appropriate databases are sent to the students so they can select their own references. Most material is sent by mail or private courier directly to the student's home address. Small quantities of articles are occasionally sent to students by fax. In brief, the Extension Library Services staff act as the arms and legs of the off-campus student who is not able to visit the campus in person.

SERVICE TO EAST KOOTENAY COMMUNITY COLLEGE

In 1990, the INFOLINE service model was modified to respond to the needs of a new UVic off-campus program. The Faculty of Education established a residential third and fourth year undergraduate teacher training program at East Kootenay Community College in Cranbrook, British Columbia, some 550 miles from Victoria. Until this time, the focus of the INFOLINE service had been to deliver library materials directly to off-campus students in response to requests received by telephone, mail, or fax. All users had been part-time adult students taking one or two courses each term.

This residential program presented a new challenge for the staff of Extension Library Services. The thirty students in the program would be taking a full complement of education courses over a two year period and each year there would be a new intake of third year students. By the second year there would be sixty students to serve. These factors implied that the workload for the Extension Library Services staff would be considerable if the students were to receive individual service through INFOLINE.

As a means to address this situation, a cooperative agreement was reached by the UVic Faculty of Education, East Kootenay Community College, and Extension Library Services. The arrangement was that the college library would assume primary responsibility for serving UVic students in the teacher training program. Funds are allocated to the college library for this purpose by the UVic Faculty of Education through a special grant received from the British Columbia government. A small amount is also allocated to Extension Library Services each year for INFOLINE support. Students in the program are instructed to use the college library to its full extent and staff in that library contact INFOLINE on behalf of the students for any material or information which can not be provided through the college. Students are told that they should not contact INFOLINE directly.

At the beginning of the teacher training program, the Coordinator of Extension Library Services visited East Kootenay Community College Library and recommended the purchase of selected reference materials and journals for the program. Retrospective sets of the *Current Index to Journals in Education* and the *Canadian Education Index* were sent to the college library from UVic for use in the program. The college library placed subscriptions to acquire the current volumes. The ERIC database on CD-ROM was later ordered for the program and mounted on a workstation in the college library. Access to the UVic online catalog was also provided through a terminal in the library.

The Coordinator developed procedures for the college library staff to use for obtaining material through INFOLINE. A request form was designed for the use of students in the program and the college library staff. Each year, the students are instructed to conduct their own literature searches in the college library with the assistance of the library staff. If the students identify material that is not available in the college library, they are instructed to check UVic's online catalog to determine whether the University owns those items. If the required material is not available at UVic, the college library staff will place interlibrary loan requests for the students through normal channels. For each item located at the University, the students have to complete one of the specially designed request forms and give the forms to the college library staff. A staff member checks each form for completeness and accuracy. The UVic call number is to be included on each form together with the student's name and registration number.

Each day around 5pm, the college library staff fax the request forms to the Extension Library Services as a batch. The next morning, one of the library assistants in Extension Library Services collects the requested materials. Articles are faxed to the college library that day if the quantity is small enough to be manageable. Large quantities of articles and books are sent by private courier to arrive the next day. In most cases, students in the teacher training program are able to receive requested materials within forty-eight hours. The college library staff receive all materials sent from UVic and post notices on a library bulletin board to inform students that some or all of their requests have arrived. If specific items are unavailable at UVic at the time of the search, reply forms are sent from Extension Library Services to advise students of the status of their requests.

To date, this cooperative arrangement has worked well for all concerned. The college library is funded so that it can provide adequate resources to assist the UVic students. The students are able to receive most library materials from the University within forty-eight hours. The work generated for the INFOLINE service is far more manageable than it would be if the students were to contact the service on an individual basis. With this arrangement, the college library staff supervise the collection of information and bibliographic references and screen requests before they are submitted to INFOLINE. This "front-end" work simplifies the tasks for Extension Library Services staff and enables them to provide the requested material in a prompt and efficient manner.

THE FUNDING OF OFF-CAMPUS LIBRARY SERVICES

Apart from the special funding provided for the teacher training program at East Kootenay Community College, Extension Library Services had been entirely dependent on an annual allocation received from the Division of University Extension. When the service was initiated in 1980, University Extension assumed full responsibility for the funding of library services for its off-campus programs. The University Library was unable to provide any financial support at that time. The Director of University Extension recognized the value of library services for maintaining quality in off-campus courses and was prepared to allocate funds to ensure that students at a distance had access to adequate library resources from the main campus. The Director also believed that off-campus students should not be charged for any library services provided from the University. He acknowledged that these students are disadvantaged in comparison with their on-campus counterparts and that the provision of library services at no charge was one way to compensate the students for their inability to use the University Libraries in person.

In the early years of the service, the annual allocation was assigned to the University Librarian by the Director of University Extension. The arrangement was that University Extension would contribute the funds for the INFOLINE service and the Library would monitor the budget and provide office space, access to the library collections, and some secretarial assistance. Those early budgets were apportioned to cover the following expenses:

○ the salary for one full-time librarian;
○ the salary for one temporary library assistant;
○ costs associated with the toll-free telephone line;

- postage and courier costs;
- photocopying costs;
- charges for online searches of commercial databases;
- charges for printing information handouts, office forms, etc.;
- travel costs associated with visits to off-campus sites.

As the workload increased in Extension Library Services over the years, the library assistant's position became full-time and some money was added to the budget for casual help. Each year the budget continued to grow in response to rising operational costs and additional business generated by new off-campus courses.

By 1987 there had been a change in administration in both the Division of University Extension and the University Library. As a result of these changes, the two staff positions in Extension Library Services were incorporated into the operational budget of University Extension and ceased to be included in the annual allocation for the INFOLINE service. Also, management of the budget for the service was transferred from the University Librarian to the Coordinator of Extension Library Services.

By 1990, the Director of University Extension became increasingly concerned about the rising cost of library services. As part of the revised mandate of the Division of University Extension under its new leadership, there was more emphasis within the Division on entrepreneurial endeavors, including the marketing of courses and services. After consultation with the new University Librarian, the Director proposed that the Coordinator of Extension Library Services explore the possibility of marketing the INFOLINE service to non-university clients. The Director believed that there should be a need for document delivery and "information on demand" services both in the Greater Victoria area and throughout the province.

Based on feedback received from students and faculty, the INFOLINE service had proven very effective in meeting the library requirements of off-campus programs. Since the infrastructure was already in place for the delivery of materials and information to remote locations, the Director felt that it would be easy to expand the service to include fee-paying clients. He also hoped that revenue brought in through these sources would offset some of the costs of the student library service. He was clear in his directive that any library services provided to external clients should result in a small profit for the University which, in turn, could be channeled back into the budget for Extension Library Services. The University Librarian was entirely supportive of this initiative and was prepared to lend circulating materials from the library collections to these types of clients.

In response to this proposal, the Coordinator of Extension Library Services developed a plan to implement fee-based services. A key decision made at the beginning was that services would only be provided to external clients on an advance payment basis. Clients would have the choice of using VISA or MASTERCARD, establishing a deposit account, or entering into an annual contractual arrangement. The credit card option was designed to appeal to the occasional user. The Division of University Extension accepts VISA or MASTERCARD for course registrations, so the processing of credit card transactions would not be a problem under this arrangement. Clients who were interested in more frequent service would be given the option of opening a deposit account with a minimum of

$500 or establishing a contract for a fixed sum over a selected period of time.

The decision had two important advantages. First, this method of payment would free the staff in Extension Library Services from the work of preparing invoices, billing clients, and collecting individual payments. Second, money received in advance through a deposit account or contract would provide the flexibility to bring in staff on a temporary basis as required to assist in processing requests from external users.

Since it was hoped that most clients would be institutions or organizations with an interest in frequent library service, the emphasis in the plan for fee-based services was the deposit account option. The Coordinator established a fee-structure for external clients based on this option. A set of unit charges was developed for the different services. The loan of a monograph from the University Libraries would be charged as one unit. The provision of a copy of a periodical article of twenty pages or less would also be charged as one unit. An article of more than twenty pages would be worth two units. A reference or literature search would be charged at the rate of five units per half hour. The initial value of one unit of service was to be $4.00. Once these charges and the various payment options were approved by the Director of University Extension, the Coordinator designed a brochure to advertise the new service. However, before he had an opportunity to begin marketing the service, the University received an unexpected overture from an external source.

SERVICE TO THE B.C. MINISTRY OF EDUCATION

The British Columbia Ministry of Education made an administrative decision in 1990 to close its library. The Ministry then sought alternative means to obtain library services for its managerial and professional staff. The provincial government at that time favored the contracting out of government services wherever possible. The Ministry approached a number of institutions to determine whether they would be interested in submitting a proposal to provide library services. The University of Victoria was one of the institutions approached.

This initiative came at exactly the right time for Extension Library Services. The Director of University Extension had recently provided the mandate to seek external clients. In response to the Ministry's inquiry, the Coordinator of Extension Library Services prepared a proposal to provide INFOLINE services to the Ministry on a contractual basis. The proposal was developed in consultation with the Director of University Extension, the University Librarian, the Education Librarian, and the Vice-President-Academic.

The services proposed to the Ministry included the following:

- document delivery of specifically identified articles supplied from the collections of the University Libraries or through interlibrary loan sources;
- the loan of circulating monographs from the University Library collections;
- reference services, including basic factual retrieval and bibliographic searching of print and electronic sources;
- current awareness services provided through the circulation of selected contents pages;
- the acquisition, by request, of new monographs and serials in the field of education;

- direct borrowing privileges for Ministry staff who wish to use the UVic Libraries in person;
- orientation sessions to inform Ministry staff of the library services available to them through UVic.

The basis of the proposal to the Ministry was the model of service provided to UVic's off-campus students. The proposal stressed that the full resources of the University Libraries, including the services of a librarian, would be easily accessible through the telephone, the fax machine, or electronic mail. Staff could contact INFOLINE at any time and request that information and library materials be delivered to their offices. Private courier and fax would be used to ensure rapid delivery of materials.

The Ministry had at that time approximately two hundred managerial and professional employees who were potential users of the above services. In order to serve that number of users, the Coordinator of Extension Library Services prepared a initial budget which contained provisions for the following expenses:

- start-up costs, including:
  office renovations,
  equipment,
  furniture,
  supplies,
  publicity for the service.
- staff costs, including:
  one full-time librarian,
  one full-time library assistant,
  temporary assistance as required.
- service costs, including:
  the acquisition of new books and periodicals,
  memberships in professional associations,
  deposit accounts with vendors such as Dialog, CARL, etc.,
  interlibrary loan charges,
  courier charges.
- office costs, including:
  telephone charges,
  printing costs for forms, labels, etc.,
  maintenance of the office equipment.
- overhead, including:
  compensation for the University Libraries for the use of materials, space, staff services, etc.,
  compensation for Extension Library Services for coordinating the contractual arrangement.

Representatives of the University and the Ministry of Education participated in a number of meetings throughout the first half of 1991 to discuss the proposed contract and its implications for both parties. An agreement was reached in the summer of that year. The Ministry accepted the proposal prepared by Extension Library Services with a few minor modifications. By that time, the Ministry was committed to the closing of its library and was satisfied that the Extension Library Services could provide adequate alternative support for its managerial and professional staff at an acceptable cost. The Ministry also realized that immediate access to the University collections would be a significant benefit for its employees. A one-year contract was prepared by the Ministry's solicitors and checked by the University's solicitors. The contract was signed at the beginning of August, 1991, and the service to the Ministry officially began on September 15th of that year.

The period from August to October of 1991 was an extremely busy one for Extension Library Services. The new staff had to be hired. Publicity for Ministry staff had to be developed. The existing office area had to be renovated to accommodate additional staff and equipment. Equipment and furniture had to be ordered.

Advertisements for a librarian and a library assistant were posted in July and the positions were filled by the end of August. Both positions were advertised as one-year appointments with the possibility of continuation subject to future renewals of the contract with the Ministry of Education. The new librarian immediately began work on developing a letter and brochure to publicize the INFOLINE service to Ministry staff.

By September, Extension Library Services' office area had doubled in size with the removal of a wall and the elimination of a corridor. A small copy center was added adjacent to the office. A high-speed photocopier and fax machine were purchased and installed in this room. A CD-ROM workstation, two Macintosh personal computers, two laser printers and a modem were acquired for the main office. Surplus furniture and filing cabinets from the old Ministry of Education Library were purchased and installed in the office area.

By November, the INFOLINE service was fully available to employees of the Ministry. Requests for specific titles were handled promptly by the new library assistant. Material not available in the UVic collections was requested through interlibrary loan sources. The CARL Uncover document delivery service later came to be used on a selective basis as an alternative to interlibrary loan. Reference requests received personalized attention from the new librarian. The ERIC and *Canadian Education Index* databases on compact disc had been acquired for Extension Library Services as part of the contract and were mounted on the office CD-ROM workstation. Much of the bibliographic searching for Ministry requests could be handled within the office using these tools, UVic's computerized catalog, and online databases through vendors such as Dialog. Access to the Internet and its resources was added later, so Extension Library Services became relatively self-sufficient in terms bibliographic access.

As a result of the personalized service delivered by the new librarian, the first year of the contract with the Ministry was very successful in terms of user satisfaction. Ministry staff who were initially skeptical of the effectiveness of a remote library service came to realize that they were receiving information and materials just as quickly as they did when the Ministry had a physical library on the premises. In many cases, staff were able to receive library materials faster than ever before due to the holdings of the University Libraries and the use of courier services to deliver items to the Ministry.

The Ministry conducted a review of the library service at the end of the first year of operation and, based on the satisfaction expressed by Ministry staff, decided to renew the contract for a second year.

To date, the service has continued to prove satisfactory to all concerned and negotiations are currently underway for renewal of the contract for a third year.

BENEFITS OF THE EXTERNAL CONTRACT

The contract with the Ministry of Education has provided substantial benefits for Extension Library Services. The new librarian and library assistant are often available to help with the student service during periods of heavy workload or staff absences. The addition of the photocopier and fax machine to the office have eliminated the need to share the use of the Library's equipment. The photocopier is now a few feet away from the staff and is faster and more versatile than any other machine in the building. The renovated office area has more space for storage and enables the staff to organize and retrieve items more efficiently from the collection of uncatalogued course materials.

The CD-ROM databases in the office are used as heavily for the student service as they are for the Ministry service. The addition of Internet and CARL Uncover access has enhanced both services. Through provisions in the Ministry budget, the Library was able to order a number of new educational journals. These new journals support both the on-campus and off-campus courses in the Faculty of Education as well as the research needs of the Ministry of Education.

Apart from the convenience of the resources provided through the Ministry contract, the real advantage of the arrangement with the Ministry is that it enables Extension Library Services and the Division of University Extension to reduce the budget for off-campus library services. Costs that are unique to the student service are still charged against the general INFOLINE budget, but costs that relate to both the student service and the Ministry service are now shared between the two budgets. An amount for overhead was incorporated into the Ministry budget from the beginning to provide the rationale for UVic to enter into this external arrangement. The overhead allocation is primarily intended to compensate Extension Library Services and the Division of University Extension for use of staff time and resources to maintain the infrastructure for the Ministry contract. That amount helps to offset some of the operational expenses of the student service.

Some of the funds saved through this reimbursement have been put right back into the student INFOLINE service. With the savings, Extension Library Services was able to introduce the use of private courier services to deliver materials to off-campus students. Regular mail services had been used previously. The courier service has significantly reduced delivery time and most students are able to receive materials within three to four days of placing their requests. At approximately the same time as this enhancement was introduced, delivery by courier also became the basis for service to another new external client.

SERVICE TO NORTH ISLAND COLLEGE

When the Coordinator of Extension Library Services learned in 1991 that North Island College on Vancouver Island was in need of library support, he saw an opportunity to initiate another fee-based service. The College had been primarily an extended campus institution, offering part-time courses at small remote centers in the northern part of the island. The college administration received a grant from the provincial government in 1991 to establish a full-time residential campus in Courtenay, approximately 150 miles from Victoria.

North Island College had to establish this new campus on a very limited budget. The campus was scheduled to open in September, 1992, and there was no substantial library to support the college system as a whole. Each remote center had a small collection of books and periodicals which had been developed over the years, but much of this material was dated and would not be adequate for the new full-time program. The college administration realized that they did not have the funds to develop a comprehensive library for the campus in Courtenay. When the Coordinator of Extension Library Services approached the Dean of Student Services at North Island College to ask if the College would be interested in entering into a formal arrangement with UVic to receive library materials in return for a fee for service, he received a positive response.

After consultation with the appropriate UVic administration, the Coordinator of Extension Library Services agreed to provide library support to North Island College according to the fee structure previously established for external clients. Both parties agreed that a formal contract was not necessary at that time. The basis of the fee structure would be a deposit account whereby the College would deposit a sum of money with Extension Library Services and unit charges would be deducted from the account for each transaction. Additional shipping and handling charges would be also deducted for each shipment sent to the College.

North Island College confirmed that it would develop a reference library at the new campus and acquire sufficient resources to provide answers to basic reference questions and to enable students to conduct literature searches in the main areas of the college curriculum. A librarian and library technician were hired by the College to coordinate this development and staff the new library. Selected books and periodicals were acquired for that library on faculty recommendation, but most of the library material required by students and faculty would be provided from UVic through Extension Library Services.

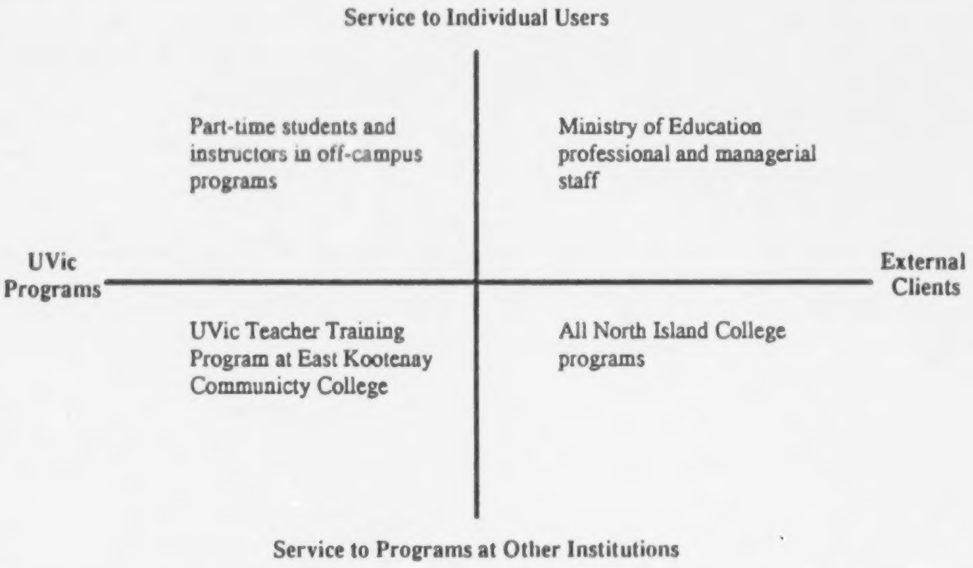
The Coordinator of Extension Library Services decided that the procedures to receive and fill requests from the College should be similar to those used for the teacher training program at East Kootenay Community College. A request form was designed for the use of students in the program and the college library staff. In terms of procedures, the students conduct their own literature searches in the college library with the assistance of the library staff. The students are then instructed to consult UVic's online catalog to determine whether the required items are available at the University. For each item located at UVic, the students complete one of the specially designed request forms and give the forms to the college library staff. A staff member checks each form for completeness and accuracy. The forms are then faxed to Extension Library Services each day as a batch. The staff in Extension Library Services collect the requested items and send the material to the College within forty-eight hours by either fax or private courier.

North Island College established the deposit account with Extension Library Services in the summer of 1992 and the service became fully operational in September of that year. The funds deposited in the account enable Extension Library Services to employ a temporary library assistant to handle the college requests and to assist with regular INFOLINE business as time permitted. As in the case of the Ministry of Education library service, the funds generated by this arrangement have further helped to reduce the overall operating expenses of Extension Library Services. Rising operational costs necessitated an increase in the unit transaction charges against the deposit account for the 1993/94 fiscal year. Even with the increase in fees, North Island College is satisfied with the service and, to date, the arrangement with the College has worked satisfactorily for all concerned.

THE UVIC MODEL OF OFF-CAMPUS LIBRARY SERVICES

The model of off-campus library services at the University of Victoria is comprehensive both in terms of the level of service provided and in terms of the types of users served. Full library services are delivered both to students and instructors in UVic off-campus programs and to external fee-based clients. Services are delivered directly to individual users and to other libraries to support institutional programs. The UVic model may be illustrated as follows:

THE UNIVERSITY OF VICTORIA MODEL
OF OFF-CAMPUS LIBRARY SERVICES


Service to Individual Users
Part-time students and instructors in off-campus programs
Ministry of Education professional and managerial staff
UVic Programs
External Clients
UVic Teacher Training Program at East Kootenay Communicty College
All North Island College programs
Service to Programs at Other Institutions

One of the key features of the UVic model is a proactive approach to user services. The success of this approach is primarily due to the role of the Coordinator of Extension Library Services. His responsibilities are full-time in this area and are not divided by other library duties. Since the annual budget for Extension Library Services contains a provision for temporary professional assistance, the Coordinator can delegate some of the reference and research requests from off-campus students to this librarian. These factors enable him to concentrate more fully on the administrative aspects of the off-campus and fee-based library services, including budget preparation, personnel management, and the evaluation of services.

As a result of his appointment with the Division of University Extension, the Coordinator is included in the meetings and planning processes of that Division. He is able to participate in the development of many of UVic's distance education courses and can advise on the use of library resources in specific courses. In addition to monitoring the fee-based library services and communicating with stakeholders, the Coordinator devotes a considerable amount of time to the following activities: determining the library needs of the University's off-campus programs; meeting with instructors, course designers, and program assistants; conducting literature searches for course development; and reviewing the library implications of assignments and bibliographies. A great deal of emphasis is placed on advance preparation in serving off-campus courses. The Coordinator tries to ensure that most materials on course reading lists are available either in the UVic Libraries or in the uncatalogued office collection in Extension Library Services. For distance education courses with large enrollments, additional copies of recommended monographs or audio-visual materials are secured through the appropriate program areas so that students can have access to specific resources within a reasonable time frame. For some course assignments, collections of readings are assembled in advance to expedite the delivery of information on popular or reoccurring topics.

The librarian responsible for service to the Ministry of Education is also proactive in her approach to meeting the library needs of Ministry employees. Files of references are created for popular or reoccurring topics. Contents pages of selected journals are routed to Ministry personnel to inform them of new articles in their areas of interest. Certain topics are tracked with the CD-ROM databases and new reference lists are produced from each update to the database. The librarian has developed an expertise in navigating the Internet and uses this resource to provide value-added service for selected users at the Ministry.

The proactive approach of Extension Library Services is reflected as well in the arrangements with East Kootenay Community College and North Island College. Advance consultation and planning with library staff at the two colleges have resulted in the development of procedures that are efficient and effective for both UVic and the colleges. The requests that are submitted to Extension Library Services are already identified as being available at UVic. The delivery of materials to the students at these institutions has therefore become a straightforward process requiring minimal involvement of the professional staff in Extension Library Services.

THE STRATEGIC PLAN OF EXTENSION LIBRARY SERVICES

The provision of fee-based library services to external clients has been successful to the point where this service has now been incorporated into the strategic plan of Extension Library Services at the University of Victoria. As a unit of the Division of University Extension, Extension Library Services participated in the divisional strategic planning process in 1991 and developed a strategic plan specifically for its operation. The plan has served to clarify the function of Extension Library Services and its relationship to the Division of University Extension and to the University Libraries. The strategic plan reflects the proactive approach to service for off-campus students and fee-based clients. The plan also serves as a reminder to staff of the purpose, values, and direction of Extension Library Services. The following three sections excerpted from the strategic plan illustrate the nature of this document.

MISSION STATEMENT

To provide effective means for University of Victoria students, faculty, and part-time instructors to access library information and materials for use in off-campus and distance education credit, certificate, and diploma programs sponsored by the Division of University Extension and, in addition, to offer library support to selected non-university clients in return for a fee for service.

VALUES

- Developing and maintaining credibility with all users by providing prompt and responsive service:
  requests for library materials from off-campus users and fee-based clients are filled as quickly as possible;
  all enquiries for library information or materials are acknowledged and given thorough attention;
  individual users are always informed of the status of their requests;
  requests from individual users take priority over other duties and tasks.
- Taking a proactive approach to service:
  library needs are anticipated and mechanisms are developed to fill those needs as required;
  information and materials are collected in advance wherever possible.
- Communicating and initiating dialogue with stakeholders:
  emphasis is placed on the exchange of information and cooperation with all relevant parties, both within and outside the University.
- Promoting awareness of library resources amongst off-campus users and other interested parties:
  attention is given to conducting orientation and bibliographic instruction sessions and preparing promotional materials that emphasize the value of libraries for accessing and retrieving information.
- Developing an information and research base in the area of off-campus library services and networking in the international library community:
  conducting research, publishing papers, and giving presentations on off-campus library services are regarded as significant activities to enhance both credibility and service delivery in this area;
  emphasis is given to sharing information and ideas about off-campus library services with colleagues at other institutions.

GOALS

- maintain the quality of the off-campus and distance education credit, certificate, and diploma programs sponsored by the Division of University Extension by providing or facilitating access to appropriate library resources as required.
- provide all users with effective mechanisms to request and receive library materials.
- enable UVic off-campus students to receive library services comparable to those provided to regular students on campus.
- To provide a level of service that will encourage external clients to continue their contractual or deposit account arrangements with UVic for library services.
- To promote, where possible, self-sufficiency amongst off-campus users in terms of access to

appropriate bibliographic resources and databases.

- To promote amongst off-campus users a basic understanding of the nature and organization of information in libraries and to encourage the use of libraries as part of lifelong learning.
- To monitor the library services provided to off-campus users and fee-based clients and to utilize formal and informal evaluation procedures to determine the effectiveness of specific services and the need for any change or enhancement in service level.
- To maintain effective working relationships with librarians at the colleges that have formal or informal relationships with UVic.
- To exchange information and knowledge about the area of off-campus library services with librarians across Canada and in other countries.

FUTURE DIRECTIONS AT THE UNIVERSITY OF VICTORIA

The strategic plan of Extension Library Services was written to support the goals and objectives of the master plan of the Division of University Extension. At present, the University Library is just beginning to develop its own strategic plan and it is important that Extension Library Services' plan be consistent with the goals and objectives of that document as well. The strategic plan for off-campus library services will continue to be monitored and modified to respond to changing conditions in the University Libraries and in the Division of University Extension.

The continuation and future growth of fee-based library services at the University of Victoria will be facilitated by the full participation of Extension Library Services in the University's long range planning processes. Extension Library Services is fortunate that the value of its operation is recognized and appreciated within UVic. Selective surveys of off-campus students have indicated that the majority of students who used the INFOLINE service have been more than satisfied. The managerial and professional staff at the Ministry of Education have also been unanimous in their expressions of satisfaction with the INFOLINE service. Feedback such as this supports the credibility and effectiveness of Extension Library Services and enables it to continue with the full support of the major stakeholders within the University.

National guidelines for library support of distance learning have recently been developed through the Canadian Library Association (in press). These guidelines stress the need for the parent institution to assume full responsibility for ensuring that its distance learners have adequate access to appropriate library resources. The guidelines further emphasize that traditional library services are not sufficient to meet the library needs of most distance learners and that special funding arrangements and proactive planning are necessary to provide equitable library support and to maintain quality in distance learning programs. At the University of Victoria, a sense of full responsibility, special funding arrangements, and proactive planning have been present since the early 1980s when the University's off-campus programs changed significantly in terms of content and delivery format. The guidelines also indicate that off-campus library services should be incorporated into the institutional strategic planning process. The Division of University Extension has provided a mechanism for this condition to be met and Extension Library Services will continue to be a part of the planning process for student services at UVic.

A challenge ahead for Extension Library Services is to continually monitor its performance in relation to the new Canadian guidelines for library support of distance learning and to seek ways to maintain its levels of service in times of fiscal restraint. To date, fee-based services at the University of Victoria have not only proved to be a means to maintain the quality of library support provided to off-campus students, but also a means to enhance that support.

The success of the fee-based library services will likely open the door to arrangements with other external clients in the future. Another major initiative within the British Columbia educational community is being explored at the present time. The current services have proven that the infrastructure for off-campus library services can be effectively expanded to include fee-paying clients. The fee-based services have proved to be a "win-win" situation for all concerned. The external clients are satisfied with the prompt services provided to them through INFOLINE and with the immediate access to the collections of the University Libraries; Extension Library Services is able to obtain more staff and resources for its INFOLINE service; the University Libraries benefit from an expanded journal collection in the field of education and a small revenue to compensate for the use of library facilities; and the Division of University Extension is able to reduce its annual allocation for off-campus library services. As long as the advantages of fee-based library services continue to be apparent to all stakeholders, these services will likely remain part of Extension Library Services' strategic plan for the immediate future.

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Use of a CD-ROM Local Area Network by Remote Site Students

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This paper presents preliminary data on remote access to multiple CD-ROM databases running on a Local Area Network (LAN). The data was collected from June, 1992 through April 1993. Because the applications described in this paper were in constant change during the period of data collection and because the remote access described has not been widely promoted, the data presented represents only an initial indication of use of such a system for information delivery. For these resons, it is far too early to draw any clear conclusions.

Elmer E. Rasmuson Library, at the University of Alaska Fairbanks, is the primary research library in the state of Alaska. It serves such diverse populations as Native Alaskan students taking distance taught undergraduate courses from their home villages to postdoctoral researchers studying astrophysics. The University of Alaska Fairbanks is a land, sea and space-grant university. It serves students spread from the Aleutian Islands to Prudhoe Bay, many of them taking courses and working on degrees at a distance. Faculty and staff are also dispersed throughout the state on five rural campuses and in six rural centers. In the 500,000 square miles of Alaska there is a sharp contrast between urban and rural environments. Most rural students live in communities where there is no highway connecting with the next town, let alone a city. Air is the primary mode of transport. Outside of Fairbanks, there are small libraries on three of the rural campuses. The other campuses and rural centers have sparse in-house collections put together by local faculty. Many rural students live in villages with only a tiny library in the local public school.

Providing library services to the students and faculty of this far-flung university has always been a considerable challenge. Four years ago, under the leadership of the Director of Libraries, Paul McCarthy, the authors began to organize the Rasmuson extended campus library services. At the same time they also became involved in an aggressive effort to make effective use of new and emerging information technologies on the Fairbanks campus.

Extended campus services developed an array of services to the rural university community including a toll free telephone line for access, telefacsimile delivery, expedited turnaround of reference questions and interlibrary loan for distance students, and a library skills course taught at a distance via audio teleconference and computer. Application of new technologies resulted in a Elmernet, a LAN which provides access to multiple CD-ROM databases at workstations placed on three floors of Rasmuson

Library. Elmernet quickly extended its reach, first to the BioSciences Library located half a mile away from Rasmuson, then to the rest of the Fairbanks campus by way of a fiber optic backbone network.

From the beginning it was apparent that direct access to Elemernet for rural students and faculty was needed. Problems both legal and technical had to be overcome.

The legal problems involved network access to some CD-ROM databases, particularly outside the physical library. Vendors have still not settled on a reasonably uniform and fair way to charge for this. Working with each vendor we have been able to gain permission for anyone with a direct affiliation with the University of Alaska Fairbanks to access the CD-ROM's on Elmernet, whether they be located in Fairbanks or a thousand miles from Fairbanks in Unalaska. We've been able to negotiate these agreements because of the unique geographic circumstances of Alaska and the small population we serve--a total student body of around 7,000 FTE(full-time equivalent). We also insure, through our software, that only authorized individuals may connect from remote areas and that no more than our license limit of concurrent users ever access a database on Elmernet.

Technically we provide dial-up up access to Elmernet over two regular telephone lines. It requires a DOS personal computer, modem (1200 to 9600 baud supported), and some specific remote access software (pcAnywhere). Initially all calls were direct dial. Anyone living outside Fairbanks had to pay the long distance charges. Understandably, dial-up use by rural users was limited. This past year, in February, we changed our phone lines to toll free access within Alaska. Rural access, and our phone bills, increased dramatically.

We have introduced remote access at a slow pace intentionally. We were unsure of the demand that such access would have on an already busy system. We also wanted to be sure the technology worked with a low failure rate. We wanted to gauge the effect of this type of access had on other library operations such as reference and interlibrary loan. We didn't want to fall into the technology trap of promising the moon and finding ourselves and our patrons deep in a hole.

With a small grant from the Alaska State Library we installed and tested the hardware and software early in 1992. By late spring of 1992 we began offering access to a wider audience--by invitation only--beginning with our rural campus libraries. By the fall of 1992 we felt confident enough about the service that we decided to change to toll free dial-up early in 1993. By February, 1993 toll free access was available. In March we began to freely distribute Elmernet registration forms to both the rural university community as well as the Fairbanks campus. One of the most frequent requests we receive is, "When can I get into Elmernet from home?"

Figure 1 shows the progression of remote sessions on Elmernet from June of 1992 through April of 1993. These numbers represent each remote logon that lasted longer than a minute from all dial-up users. Sessions by Rasmuson Library faculty and staff who dial into the system were deleted from these statistics.

The steady growth of remote access, even without toll free access, became apparent in the first few months. The intensity of use followed the course of the fall semester as one would expect, peaking in

November when term papers are being written and dropping off with the end of the semester in December. There is a natural increase as the next semester begins in the second week of January. The dip in sessions in February is most likely due to two factors. First, the modem on one of the dial-up machines was not working properly, often reducing the dial-up bottleneck to one session at a time. Second, in February library faculty, teaching library skills on the Fairbanks campus, had 77 dial-up sessions on the LAN as they demonstrated the various databases in class. The dramatic jumps in March and April coincide precisely with availability of toll free access. Although these numbers pale when compared to the 56,000 sessions Elmernet had from Fairbanks campus users during the same time period, we expect that remote access will continue to grow for several reasons that we will present later in this paper.

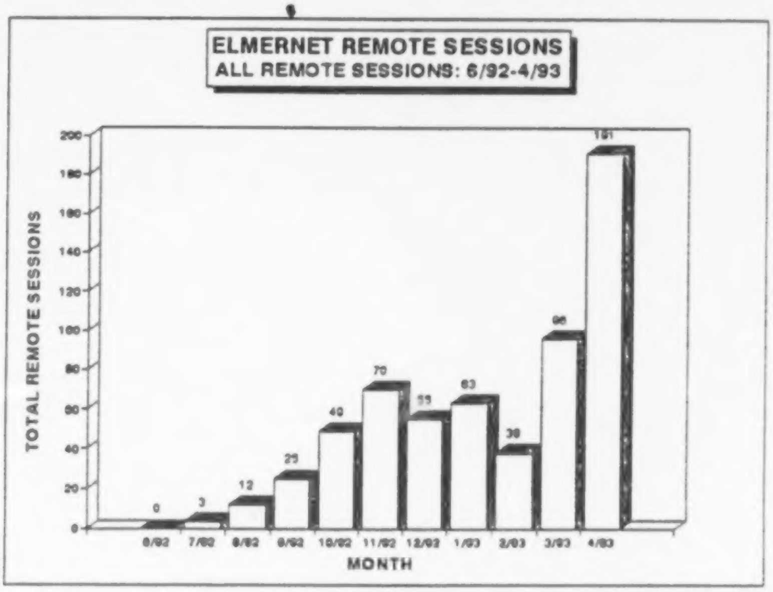

FIGURE 1

Providing such a service is not without expense. Initially we estimated toll free access on two lines would cost in the neighborhood of $100 per month. The April, 1993 charges to the library for 191 remote sessions came to $210.10. Several sessions ran over 40 minutes. We have since discussed limiting the length of remote sessions.

Of the 22 databases currently available on Elmernet we found some surprises with frequency of use among the databases. Figure 2 provides a breakdown of sessions by database. We expected the most popular database would be LaserCat, as it is for Fairbanks campus patrons. LaserCat is a CD-ROM book catalog. What was different from on-campus use patterns was that the second most used database was PolarPac, a collection of polar databases from around the world. In statistics from workstations within the library, PolarPac sessions drop down in the "also ran" numbers. There may be a correlation between the higher use of PolarPac for remote patrons and their academic work in related subject areas covered by the database. This remains an area for further research.

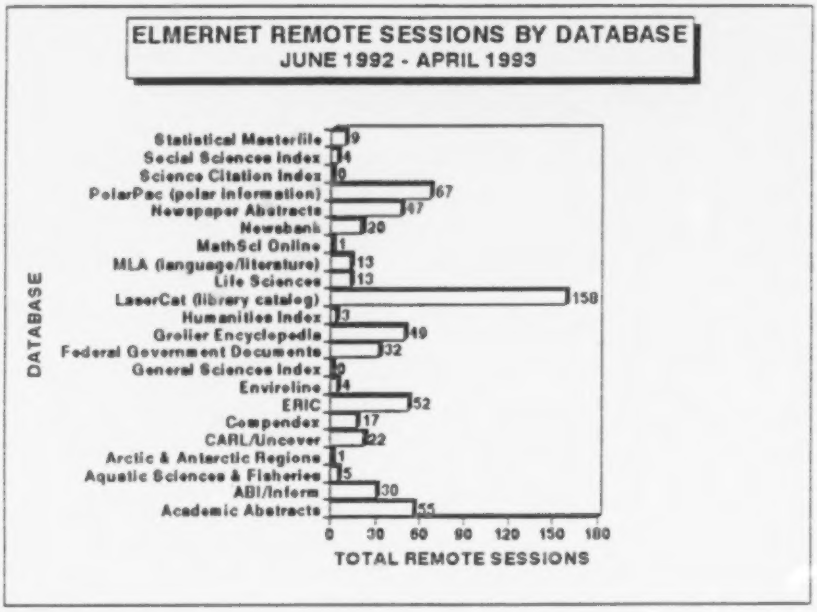

FIGURE 2

Use patterns for remote and local searchers were more in sync with relatively high use of *Academic Abstracts*, ERIC and *Newspaper Abstracts* by both groups. Low use of other databases may be skewed because some were only recently added (*General Science, Humanities and Social Sciences Indices*). A longer period of data collection is needed.

The moderate use of CARL/Uncover is interesting. It represents the first database available on Elmernet via a telnet link over the Internet. This link is transparent to the user. This database was added to Elmernet in January of 1993 and is restricted to one user at a time. In addition, problems with local software often made this database unavailable on the network. Finally, unlike the other databases which, in their CD-ROM form have colorful screens and graphic layout, CARL is a basic text only interface. These factors all make its moderately high remote use intriguing. It may be that most of the remote sessions came from librarians already familiar with the CARL/Uncover database. Our analysis has not yet examined the relationship between type of user and database searched.

Figure 3 presents a breakdown of the type of users who had 602 remote sessions on the network during the data collection period. The library users consist of three libraries, each with one microcomputer used for dial-up access. We don't have any reliable information at this time whether library sessions represent librarians or patrons searching remotely. The individuals are the individual students, faculty and staff who have requested a personal ID on Elmernet. Every remote user is required to have a separate ID. This is one way we meet licensing restrictions on some databases. Every person to whom we issue an ID has an affiliation with our university. The .8% represented by "other" users are sessions we permitted in an earlier testing stage when we had a "guest" ID which anyone could use. Once the raw data has been processed to obtain numbers on searches by type (student, faculty, staff), information on individual users is erased.

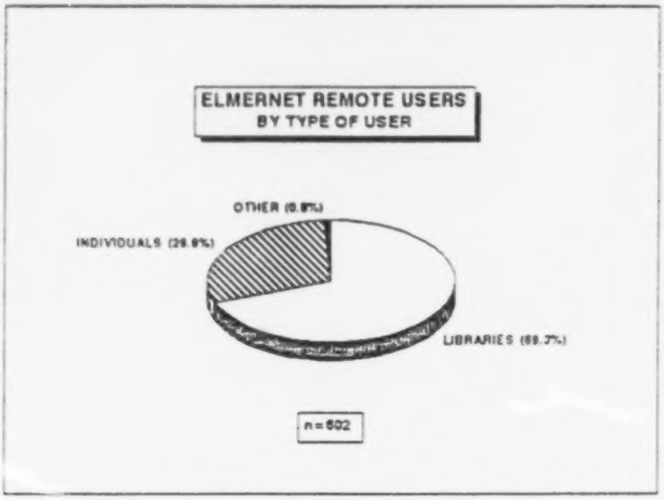

FIGURE 3

A further examination of individual users is presented in Figure 4. We have broken down the categories of university users into undergraduates, graduate students, faculty and staff. These

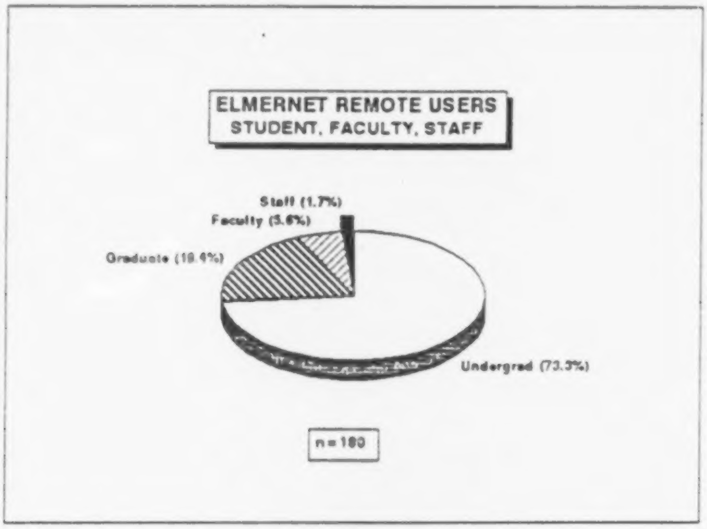

FIGURE 4

represent 180 sessions, most since January of 1993. Again, we currently have no fine measurement of exactly who was searching from the three libraries dialing into the network. Happily the system appears to be working as it was intended--primarily as a research tool for students. Almost 93% of the individual sessions we can identify were conducted by students.

We only see more growth for remote access. First, and most basic, people like it. They like being able to search for information they need on their own timetable. Second, we will continue to publicize the availability of remote access. We only began a low-key effort over the past six months. Visibility will bring users. Third, we will begin to incorporate use of Elememet into distance taught courses, both in library science and in other disciplines as we work with faculty on research needs for their distance taught courses. It is not insignificant that the remote access use goes up at approximately the same time as use goes up on campus. It means distance taught students can move through the same academic schedules as local students and learn to use the same information seeking skills. The previous model for distance taught students has been a passive one. All the information they might need was delivered to them, or someone else did all their library research for them, or research was simply not a component of the distance taught course.

We believe Elmernet with remote access and other systems like it, along with the explosion of networks and databases represented by Internet and the commercial information utilities like CompuServe are making the passive model into a museum piece.

For the future we hope to collect a larger sample as dial-up access becomes more common among our distant patrons and we can begin to compare use across semesters. We also plan to further refine our data to look for correlation between databases searched and type of person searching (undergrad, grad, faculty, staff). Our software also records the length of each search and we plan to analyze that data to see if the average length of a search increases or decreases over time.

On the technical side, we realized from the start the limitations of the approach we were taking for dial-up access. Users are restricted to DOS microcomputers and use of the pcAnywhere software which they must buy (retail: $126.00). At the time these were the best alternatives we found available to at least begin to open access to patrons who could not easily travel to our library. Our current remote users have the same look and feel when they are connected as our users sitting at a workstation in Rasmuson Library. Our current technology acts as its own limiting factor to growth. Not everyone has a DOS computer. Not everyone can afford $126 piece of software. Having only two phone lines also limits growth. We were not completely against these limits for they have given us time to develop remote access in an orderly and careful fashion. For example, we have already faced a hacker dialing into the system and dealt with it by tightening security without much bother to the users. We have learned to walk; we are ready to run.

By the fall of 1993 we hope to have in place telnet access to Elmernet with standard terminal emulation. This will open the remote door to many more users and the real limiting factors will become the physical boundaries of CD-ROM's to handle many concurrent sessions and the legal boundaries of license agreements. We anticipate we may begin to increase access to more Internet services like CARL/Uncover. With any luck our patrons, both remote and local will only know that they have fast, reliable, understandable access to the information they need without any notice that they may be looking at information from a database stored next door or a CD-ROM from a 1,000 miles away.

The Schaffner Model of Library Services

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Northwestern University

The many new programs designed to meet the needs of non-traditional students mean that participating in higher education no longer requires traveling to a traditional campus. Instead, many students now attend classes in a variety of extended campus settings. However, while most extended campus locations have adequate classroom space, few have the other support services available at main campuses. Ensuring that these students have equitable access to services that support and enrich their educational experiences presents an important challenge to institutions planning to deliver higher education programs in nontraditional settings.

For the academic libraries of these institutions, planning for and delivering equitable library services to extended campus programs is a critical issue. Traditionally, the library has been considered the "heart of the university", and access to library resources and developing skills in their use are assumed to be important elements of the academic experience for all students. Increasingly, regional accrediting agencies are requiring that institutions provide library resources for nontraditional programs as well as for traditional on-campus programs (Bradburn and Marks 1991). Yet, academic libraries are seldom given funding to build new libraries at extended campus locations. Instead, they must determine what services and collections are needed and find affordable alternative methods for delivering them.

At Northwestern University, over 3000 adult students attend classes at an extended campus site located twelve miles away from its main campus in Evanston, Illinois on the University's downtown Chicago campus. Providing high quality, equitable library resources for these students presented a significant challenge. Although the Law and Medical libraries are located on this downtown campus, the library collections most directly related to the programs which enroll these students are located on the Evanston campus in the Main Library. Since 1927, the Schaffner Library, a University Library branch, has existed on the Chicago campus but had suffered from serious neglect and was no longer equipped to meet the needs of these students. Building another library on the Chicago campus to support a general undergraduate curriculum as well as graduate management and journalism programs was too expensive to be feasible. Requiring students to travel to Evanston or to use other Chicago area libraries did not provide adequate or equitable library services, made them feel like "second-class" students, and effectively discouraged most library use in these programs.

To solve this problem for Northwestern's students and to contribute to the larger discussion of extended campus library issues, the Northwestern University Library proposed in 1984 to develop a program of library services at the Schaffner Library which could serve as a model for extended campus library services (Pickett and Nielsen 1991). In lieu of building an on-site library collection to support these programs, the Schaffner Model emphasizes user education, electronic access to information, and document delivery as the most effective means of delivering library services in this setting. The Schaffner Library has provided a fertile environment for studying both the needs of adult learners and the challenges of the extended campus setting and for developing library programs and services to meet them (Alexander and Steffen 1989; Steffen 1987; Alexander and Steffen 1990). An examination of the Schaffner Model provides insights into the design and delivery of an effective program of library services and an understanding of the resources required to do so.

DESCRIPTION OF THE SCHAFFNER MODEL

The basic components of the Schaffner Model include 1) an active bibliographic instruction program; 2) emphasis on information technology as the most effective method of information access and as a most critical area for skill development; 3) document delivery as the preferred method for delivering library materials; 4) close collaboration with administration and faculty to integrate research skills and library use into the curriculum; 5) a strong cooperative relationship with other parts of the Northwestern library system; and 6) adequate investment in facilities and staff.

First, the foundation of the Schaffner Model is an active bibliographic instruction program which is designed specifically to meet the needs of adult learners and reaches over 1500 students each year (Steffen 1988). Adult students often are unfamiliar with using libraries in an academic setting. Their information retrieval skills are almost entirely undeveloped, usually including little knowledge of electronic or print sources. On the other hand, as older students, many of them are highly motivated to succeed in school and are quite receptive to learning skills that they need to meet their goals. This program which is delivered primarily as course-related sessions addresses four main areas: proficiency in information retrieval skills, increased comfort and confidence in using libraries, experience with computer information technology, and efficient time management. Classroom sessions emphasize the research strategies and critical thinking skills that students can use to do library research and complete specific assignments.

Schaffner's instruction sessions are designed to empower students by explaining how to select the information they need to write a paper or complete a project. The focus is on navigation and selection of appropriate sources rather than on the mechanics of using a particular tool. Information technology is heavily emphasized, although not to the exclusion of printed sources (Marshall 1991). Students are encouraged to interact and react whenever possible during the instruction session. This is done through frequent questions from the librarian, through small group sessions, and through written comments elicited by the librarian at the beginning of the class. These comments are responses to an "ice-breaker" request by the librarian that students write down any problems or questions that they have had while using libraries and help to focus instruction on areas of concern to students. Increased interaction by students in the classroom seems to increase the students' comfort with the librarian and, by extension, with the library. It also requires them to be active, which they will have to be when they do their library research. Relationships established in the classroom are continued through interactions between student and librarian in the library, where students receive one-to-one instruction on finding information for paper topics using computer information technology and print sources.

Second, the "electronic library laboratory" envisioned at the beginning of the Schaffner Project has become a reality. Students use a local area network providing access to CD-ROM, online, and locally-owned databases and to the Internet. The addition of LEXIS/NEXIS and FirstSearch to the wide range of CD-ROM and locally-owned databases already available has insured that all subjects in the curricula are supported by information sources easily accessible at Schaffner. The network also provides an Internet connection to catalogs from many university and research libraries around the world. A clear system of menus groups databases by broad subject area (e.g., business, arts and sciences) or by type (e.g., remote library catalogs), with telecommunications scripts that automatically connect and sign on users to databases and systems around the world.

All of the CD-ROM and online databases on the Schaffner network are searched regularly. During 1992-1993, users conducted an average of 1500 searches per month. LEXIS/NEXIS is by far the most popular single resource on the network, with over 60% of network searches being done in that source. Students frequently search in several databases while sitting at a network terminal, and the different search protocols do not seem to hinder people from finding the information they need. Librarians and library science interns work with students on refining searches, thinking critically about the information found, and brainstorming to come up with other strategies that might work to find information on a topic.

In-class instruction plays an important role in insuring the success of the electronic library. Although students are quite willing to experiment with databases that they have not had instruction in, formal instruction makes them more aware of and confident in their ability to use information technology. In a 1992 Schaffner study, students who participated in instruction sessions were less confused about computer databases, were familiar with a larger number of databases than those who had not, and reported using a wider variety of resources. Those who had not attended an instruction session were less likely to have used databases at all.

Third, after teaching users how to do research and assisting them in using electronic resources to identify the materials they need, Schaffner staff retrieve these materials from the Main Library or via interlibrary loan. Schaffner staff transmit these requests for books and journal articles to the Interlibrary Loan Department each evening after classes begin. A staff member at the Main Library collects the requests from the fax machine, locates materials in the Main Library stacks, makes photocopies of journal articles, charges out books in the NOTIS circulation system, and places all items in a box for van delivery to Schaffner the next day. When books are picked up by the user, they are charged directly to the user in NOTIS, so that users may return or renew their books at any Northwestern library, and no further record keeping is necessary. Photocopies of journal articles are provided to users at no charge.

Several basic assumptions are essential to the success of this service model. First, the users of the Schaffner Library must believe that delivery of library materials can meet their information needs as well as a visit to the library that holds the material would. They must be satisfied with being dependent on library staff to retrieve the materials they need. They must also be confident that the materials they request will in fact be delivered "in time". These users must also master the information technology and the library practice necessary to access a collection remotely because they cannot rely on shelf browsing to compensate for access problems. Second, the Schaffner Library must have the technology and the staff resources available to operate the service. The Library's bibliographic instruction program must convey information about the service and how to use it to users. The third major assumption is that most of the requests will be able to be filled from the Main Library collection. Not only will the materials needed be owned by Northwestern, but they will be available for delivery when users need them. It is assumed that the Main Library Interlibrary Loan Department will have enough staff to handle the demands placed on it by Schaffner users, that it will be able to integrate this priority service with its other lending obligations, and that it will be able to accommodate a service designed to meet the needs of evening students.

All in all, when one looks at quantitative measures, i.e. number of requests sent, fill rate and turnaround time, the service seems to be performing, while not perfectly, certainly more than acceptably. During 1992-1993, Schaffner users initiated over 2400 requests. The majority of users are receiving the bulk of the material they request in a reasonable amount of time. Materials which are owned by Northwestern but which cannot be located continue to be a major cause of unfilled requests. And, as users become more expert with a wider variety of electronic resources the need to supplement Northwestern's collections with interlibrary loan has increased. Students who have used the service are fairly satisfied with it, but express a strong preference for being notified as soon as possible about the status of their requests. The most common reason for not using intercampus loan is simply not knowing about or understanding how to make use of it. So, librarians and other Schaffner staff must constantly promote and interpret this aspect of the program. The Main Interlibrary Loan Department, which is experiencing exponential growth of its own, is constantly striving to integrate the demands of this fast-turnaround service with its other commitments. Continually monitoring the performance of the service and frequent communications among the staff of the two departments has insured that users' needs are met.

Fourth, a strong partnership with University College administration and faculty has been an essential part of the development of the Schaffner Model (Steffen 1990). Initially, University College administrators recognized the need for library services for their programs and were eager to support an innovative solution. They believed a program of high quality library services would not only lend an air of legitimacy to their non-traditional program, but would also assist them in maintaining high academic standards. And, they were interested in the development of a model that could be implemented by other continuing education programs. Since the program's beginning, they have expressed strong public support for the role of the library in their programs. Their faculty know that library research is not only highly valued but is in fact expected in most University College courses because they have heard this message directly from the University College leadership. Additionally, these administrators have been important advocates with the University administration for increased funding to support Schaffner's programs and have made financial contributions from their own funds when an additional stimulus was needed.

Working closely with faculty has been a major emphasis of the Schaffner Model. In most academic libraries, bibliographic instruction and other programs to stimulate student library use are unlikely to be successful without faculty cooperation, and the Schaffner Library is no exception. Its program of outreach to faculty is designed to raise their awareness of library resources, to collaborate with them in teaching their courses, and to support them in their development as teachers (Steffen 1987).

Librarians communicate frequently with faculty in a number of forums. Each semester faculty receive a letter from the library offering assistance in designing library assignments, providing bibliographic instruction, and facilitating access to library resources. Librarians follow-up these letters with telephone calls offering to schedule instruction or other services. The Head of the Library speaks to faculty at each University College faculty meeting about new developments in the library program. Librarians also attend departmental dinners and meetings not only to report on the library but also to discuss curricular issues. These consistent appearances not only keep faculty informed about library resources, but they also establish the library as an integral component of the University College program, and librarians as important sources of support for the faculty.

Particularly in the area of bibliographic instruction, a collaborative relationship between librarian and faculty member has been crucial. Ideally, the faculty member communicates the assignment and its context to the librarian, and the librarian communicates the importance of the library to the curriculum as well as the great potential that the library has to contribute to the education of the students. Schaffner librarians initiate communication by contacting instructors at the beginning of each semester to talk about the possibility for instruction in that class. Librarians and faculty can then collaborate to design library research assignments and to provide feedback on student progress as assignments are completed.

Because so many of its faculty are novice teachers, University College provides an extensive faculty development program. An introductory workshop for all new faculty conducted by several University College administrators and a librarian presents information about teaching adult students, designing library assignments, and University College procedures. Throughout the year, University College's Faculty Development coordinator operates faculty seminars covering such topics as motivating students, presenting effective lectures, teaching thinking skills, grading and evaluating, and integrating library skills. Librarians have been involved in both planning the seminar series and in presenting individual sessions on library and writing skills.

In addition to participating in the faculty development program, Schaffner librarians also provide library support services for faculty. Instruction for faculty in the use of the online catalog, online searching, and CD-ROM technology assists them in updating their own research skills and makes them more confident about recommending these resources to students. Librarians also help faculty meet their own information needs with research assistance and free online searching. For faculty whose primary employment is in a nonacademic setting, these contacts with librarians provide a connection between their own professional needs and the academic setting in which they teach. To assist faculty in improving their teaching, the Schaffner Library's collection also includes books on effective teaching techniques and journals in the field of adult education.

Fifth, maintaining a strong, positive relationship with the rest of the Northwestern library system has been important to the success of the Schaffner Model. Efficient access to the resources of the University Library, both collections and staff, makes the service-based Schaffner Model work. A strong communications infrastructure, including telephones, daily van delivery, fax machines, and electronic mail, is essential to achieve efficient access to these resources. Building good relations among staff lays an important foundation for the delivery of services. Schaffner librarians travel to the Evanston campus frequently to participate in activities there, and host staff from Evanston campus departments on regular visits to Schaffner. The Schaffner Library is a department of the University Library, and its librarians participate on library-wide committees. This participation not only keeps Schaffner librarians informed about the issues facing the larger library, but keeps Schaffner's programs and concerns on the agenda of the larger library. In addition, Schaffner librarians contribute their expertise to projects of the larger library which helps main library staff view the Schaffner Library as a producer as well as a consumer of resources. Finally, as the local experts on adult students, the Schaffner librarians have served as advocates for these students within the larger library. University College students use the services of many University Library departments, and Schaffner librarians have been able to prepare the departments for these users as well as teaching them to be more effective users.

Finally, the Schaffner Model has proved a cost effective method of providing library services at an extended campus site, but it has not been without cost. The most important investment has been in a highly qualified and competent staff because in spite of its emphasis on electronic resources, Schaffner's services are very labor intensive. Adequate professional staff have guaranteed that the bibliographic instruction program permeates the curriculum, that students can always find someone to help them in the library, and that new services and programs can be designed and implemented quickly to respond to user needs. Sufficient support staff resources keep computers and other important machines running and insure that document delivery from the main campus operates efficiently so that users are minimally inconvenienced by not having a library collection at the extended campus.

Information technology that enables users to quickly and efficiently access the information they need has been the other major area for investment. The availability of grant funding made it possible to follow new developments in technology, such CD-ROM, local area networks, and the Internet, so that users have access to a state-of-the-art electronic library. A substantial investment in a wide variety of CD-ROM products and online access has insured that all subject areas have access to electronic information. Many users who were initially uncomfortable with the lack of a collection have been reassured by this superior access to technology and have come to see Schaffner as their primary information resource. Technology has enabled staff to deliver a higher level of service and for users to achieve more satisfying research results, consequences that would have been unlikely without this substantial investment in technology.

CONCLUSION

Northwestern's experience with this service model for an extended campus site demonstrates that equitable high quality library services can be delivered without building a traditional, collection-based library. In order to be successful, the institution must be willing to invest in staff and information technology and to design and carry out a program that meets the particular needs of its users. The *Guidelines for Extended Campus Services* (1990) issued by the Extended Campus Services Section of the Association of College and Research Libraries encourage all institutions with extended campus programs to make this investment. The Schaffner Library has also developed a checklist for planning for library resources for off-campus programs which can be found in the appendix to this article. While developing such a program is not without costs, it will enable students who attend extended campus courses to experience the same quality educational experiences as those students in more traditional programs.

APPENDIX

A Checklist for Planning for Library Resources for Off-Campus Programs

1. Define the nature of the program to be supported.

2. Profile the students who will be enrolled in the program.

3. Coordinate planning for library services with other units involved in delivering off-campus instruction. Make sure that professional librarians, adult educators, and faculty are involved in planning.

4. Identify goals and objectives clearly.

5. Identify the best methods for delivering services and resources.

6. Develop realistic budget goals and proposals; be prepared for this to take three years and try to project for five years.

7. Determine evaluation measures to be used with library services.

8. Set up the initial program of library services and make sure they are advertised.

9. Set up a communication mechanism between the main library and off-campus library sites.

10. Be creative and take advantage of opportunities for innovation.

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Library Services for the Open Learning Agency of Australia*

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INTRODUCTION

The establishment of the Open Learning Agency of Australia (OLAA), which offered its first courses in March 1993, is a new development in university education in Australia. Resulting from an initiative of the Australian government, the OLAA brings to the Australian public the opportunity to study for university degrees, at a time when there is a large unmet demand for university places. Unlike traditional courses at Australia's universities there are no entry requirements and no quotas on the number of students who may study this way.

The establishment of the OLAA follows the successful Television Open Learning Project which was funded by the Australian government in 1992. A consortium of five universities combined with the Australian Broadcasting Corporation to offer seven first year university subjects, which were studied in the off-campus mode using television broadcasts as a central part of the teaching process. The response to the project was much greater than anticipated, with approximately 5000 students participating during the year long trial.

In July 1992 the Australian government called for expressions of interest from universities for the expansion and development of the open learning concept. In September the Government announced the award of 28 million dollars over ten years to Monash University in Victoria to develop an open learning agency in collaboration with a consortium of universities.

A further sum of 25 million dollars is to be made available through the Department of Employment, Education and Training for the development of an electronic access network to support open learning. It is envisioned that a system of access centres will enable students to communicate with the universities involved for a variety of purposes, including tutorial support, submitting assignments and library access. Deakin University (1993) was commissioned by the Government to carry out an investigation into the operation and feasibility of such a network.

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*This paper was not presented at the Sixth Off-Campus Library Services Conference.

THE OPEN LEARNING AGENCY OF AUSTRALIA

The Open Learning Agency of Australia is a company of Monash University. It acts as a broker for subjects offered by a consortium of participating universities. At its commencement in March 1993 the OLAA offered 19 subjects, provided by five universities. For the first term there were 3786 student unit enrolments, broken down as follows: Monash University 1980, Deakin University 723, the University of South Australia 364, Griffith University 97, the University of New England 622.

By 1995 it is expected that more institutions will be involved and that the number of subjects will have increased to 150. Subjects will be offered by a variety of media. The majority will be offered by print; others will utilise television or radio broadcasts and a further number will be delivered directly by computer. It is the first time in Australia that television and radio have been used nationally to offer accredited university courses.

The OLAA does not award its own degrees. Students may complete Monash University general studies and business studies degrees or they may transfer to other participating universities to complete their degrees. The OLAA is responsible for the provision of information and advice, enrolment of students, maintenance of comprehensive student records, collection and distribution of fees, and coordination of library services. The individual providers are responsible for mailing course materials, marking assignments, setting exams and providing tutorial support.

Critics of Open Learning are alarmed that the whole initiative is severely underfunded and that OLAA students are being treated as second class citizens. OLAA students pay $300 for each unit of study. Provider universities receive a portion ($180 in 1993) of the fee per unit. Eight units of study constitute a year's full time load, which, therefore, costs a total of $2400. By comparison, Australian universities currently receive about $9000 per year for each full time student enrolled in their degree courses. The bulk of funding is provided by the Australian government, but about $2400 is paid by each full time student through the Higher Education Contribution Scheme. This scheme allows students to defer payment of the fee, which can be paid as a 1-4% levy on income tax when they complete their degrees and gain full time employment. OLAA students do not have access to the Higher Education Contribution Scheme and must pay fees up front.

It is clear that the funding available for the provision of courses through the Open Learning Agency of Australia enables only a minimal level of service and support.

LIBRARIES AND OPEN LEARNING

It is important that quality library support is available to OLAA students. They are real university students studying real university subjects for credit towards real university degrees and they have the same need for library support as students enrolled as on and off campus students at Australia's universities. Students need to acquire research skills in finding information and using it. It is essential for the success of the Open Learning venture that the standards reached by OLAA students are comparable with those of traditional university students. Potential employers will expect them to be information literate. The report Library provision in higher education institutions (National Board of Employment, Education and Training 1990) recommended that universities provide at least

90% of texts and materials recommended for their courses. OLAA students have the right to expect the same level of availability of materials required for their courses.

Library services are coordinated by the Open Learning Library and Information Service at Monash University. The Service performs a range of functions, including:

- coordination of the OLAA Australia-wide library network
- operation of a voucher scheme for loans and services
- distribution of collection development grant funding to provider universities
- preparation and distribution to students of the Open Learning Library Guide (Open Learning Library and Information Service 1993)
- acting as a library of last resort by holding a copy of all materials recommended for Open Learning units

The provision of library services has been a very controversial issue. I argued that library service for Open Learning should be the responsibility of the provider libraries only (that is, the libraries of the provider institutions) and that any funding available should go to them (Tucker 1992). I believe that the provider libraries have the best collections to support their OLAA units. The Open Learning Library and Information Service, however, plans to develop an Australia-wide library network, involving public libraries and other university librararies as well as provider libraries. Despite strong objections from some of the consortium universities, a voucher system has been introduced as the mechanism for enabling students to obtain library service. The operation of the voucher scheme will be reviewed at the end of 1993, which can be regarded as a trial year as far as the participating libraries are concerned.

It is widely acknowledged that funding for library support to Open Learning students is inadequate and that it provides for only a very minimal level of service. The librarians of some of the major provider universities believe that they have a moral responsibility to support OLAA students taking units offered by their universities, but unfortunately, because of the low level of funding, are forced to charge for some, or all, of the services, particularly for delivery services to distant students.

The funding which is available comes from two sources. Firstly, the Australian government has provided a grant of 3.6 million dollars over ten years for collection building in the provider libraries. It is likely that this money will be distributed on a flat rate based on the number of student unit enrolments at each institution. At the time of writing it is proposed that this rate be $30 per student unit during the development and collection building phase over the first three years, followed by a smaller sum of $3-4 for collection maintenance during the remaining seven years. These figures are based on a projected student enrolment of 20,000 student units a year. The second source of funding is from student fees. Out of the $300 fee for each unit, $20 is available to the Open Learning Library and Information Service for the provision of library service.

THE OPEN LEARNING VOUCHER SCHEME

For each unit they study students are issued with five vouchers which they use to buy library services at participating libraries. The vouchers are worth $4 each to libraries when submitted to the Open Learning Library and Information Service for redemption. In proposing the voucher scheme Monash University Library anticipated that the vouchers would be widely used to pay for individual transactions (e.g. one voucher for an in-person loan of a book, two vouchers for delivery of a book, etc.) at participating university and public libraries. At the time of writing, arrangements for the wider library network involving public libraries and non-provider universities have not been completed. Library service is currently being offered by the provider libraries only. Most of them have, however, decided not to accept vouchers for individual transactions, but are accepting them towards in-person membership fees or delivery service subscriptions as applicable.

I do not believe that the voucher scheme is the most appropriate way providing access to library services. The cost of administering the scheme reduces the very limited amount of money from student fees which is available for library support. The effectiveness of what remains after allowing for administrative costs will be reduced further by being dispersed over a network of public and university libraries when the full network comes into operation. The provider universities generally aim to provide 90% of the library materials recommended for their OLAA courses, but I doubt if other participating libraries will have any such commitment, nor are they likely to hold more than a limited number of requested items. The voucher scheme may lead students to expect that recommended materials are widely available. This is simply not the case. For instance, no copies of any of the seven titles recommended for assignments on Catholicism in the Religious Studies unit were listed on the Australian Bibliographic Network as being held in Sydney, Australia's largest city, or the states of Queensland or Tasmania All titles were, however, held by the joint providers of the unit (Deakin University in Victoria and the University of South Australia). In view of the fact that the Australian government is providing funding for collections of OLAA materials in the provider libraries it seems logical that the providers should be responsible for the provision of all of the library services.

SERVICES OF PROVIDER LIBRARIES

The libraries of the five provider institutions which are currently involved, together with Curtin University and Charles Sturt University, which will both be offering units in the near future, are all offering both on and off campus library services to OLAA students.

An example of the services available to OLAA students and the fees charged are those of Deakin University Library, which operates the largest off campus library delivery service in Australia. For a fee of $60 for a six months subscription, OLAA students who are studying a Deakin unit ($150 if they are not) may avail themselves of all of the services available to Deakin University's degree students through the Off-Campus Library Service (Cavanagh and Tucker 1993). In 1992 approximately 32,000 books and audiovisual items and 14,000 photocopies of journal articles were sent to students and 1,600 subject requests completed Features of the service include the same or next day dispatch by courier of items available for loan, prepaid satchels for return of items to the library, unlimited photocopying of journal articles, subject requests (including online and CD-ROM database searches) performed by reference librarians. Students can make their requests by whatever means suits them best - mail, fax, phone, electronic mail or by dial-in access to the catalogue. Direct dial-in access to databases such as ERIC will soon be available through the Library's Innopac system. Students who wish to borrow in person from the libraries at any of Deakin University's five campuses may register free for a period of six months if they are studying a Deakin unit. Members of the public, including OLAA students who are not taking Deakin units, may register for $50 per year.

At the time of writing it is not possible to provide meaningful statistics on the extent of library usage at the provider libraries in 1993. It is useful, however, to examine statistics available for the usage made of Deakin University Library's delivery service by the Television Open Learning (the OLAA precursor) students. In this case, there was no funding for library support and a fee of $150 was charged per subject for a six month subscription to the delivery service. Table 1 shows the extent of library usage between March 1992 and February 1993 for the three subjects offered by Deakin University. These three subjects are now being offered by the OLAA.

Table 1. *Deakin University Off-Campus Library Delivery Service: usage by Television Open Learning students*

	Statistics (1 unit)	Religion (1 unit)	Anthropology (1 unit)	Totals
Library usage				
Requests received	30	223	485	738
Books, AV sent	27	170	421	618
Ph'copies sent	-	62	82	144
Subject requests	-	6	16	22
Library registrations	15	29	45	89
Student enrollment details*				
With assessment	161	134	130	425
Without assessment	272	83	145	500

* For the Television Open Learning Project there were two enrolment options. Students could purchase study materials together with assessment for credit, or they could purchase materials only, without assessment.

These figures demonstrate that there was a substantial demand for library delivery service and, as might be expected, that the demand varied according to the subject. In the case of Religion, a one unit subject, students who subscribed for library delivery service were sent, on average, seven books and six photocopies. For Anthropology, a two unit subject, students were sent eleven books and 9 photocopies. Both subjects have extensive reading lists.

THE ROLE OF PUBLIC LIBRARIES

Public librarians are concerned about the impact of the OLAA on public libraries. Unlike the situation in the United Kingdom, where Open University students receive substantial support from public libraries, Australian public libraries are not funded to provide a high level of support to university students. A survey of public librarians (Grosser and Dodrell 1990) showed that they were reluctant to provide services which they perceived as the responsibility of academic libraries and emphasised their recreational role in the community rather than their educational role.

Public libraries have been invited to participate in the voucher scheme. Response has differed in the various states. For instance public libraries in Victoria have decided not to participate, whereas public libraries in Queensland have expressed support. Participation in the voucher scheme poses a number of problems for public libraries. A fundamental philosophical issue is that of receiving payment (by means of vouchers) for loans which are currently provided free of charge. It has been suggested to public libraries that, even if they do not wish to accept vouchers for the loan of materials in their own collections, they could use vouchers to cover the costs of obtaining materials on interlibrary loan. This again poses problems. As mentioned previously many of the recommended materials are of a specialised nature and are not readily available at public libraries or university libraries other than those of the provider institutions. Provider libraries may be reluctant to have books away from the library for the longer loan periods involved in interlibrary loans at a time when they are required by OLAA students who have registered directly with the library, or by the university's own degree students doing the same subject.

I do not believe that it is appropriate to expect public libraries to provide items required for OLAA courses other than those of a general and reference nature. I believe, however, that public libraries have a significant role to play in providing information on the OLAA and the services which are available from the provider libraries. It is important that public libraries are kept well informed of OLAA courses and that they are supplied with reading lists so that they may purchase items if they wish. The interim report An electronic facilities network to enhance tertiary open learning services (Deakin University 1993) suggests that it is as access points to the proposed electonic network that public libraries may be able to play their most useful role.

THE OPEN LEARNING ELECTRONIC FACILITIES NETWORK

The interim report *An Electronic Facilities Network to Enhance Tertiary Open Learning* discusses the ways in which an electronic network could be utilised in facilitating communication between Open Learning students and institutions involved. The report examines how such a network could be used in the provision of library services. Access to the network is proposed through a system of access centres, as well as through personal computers and modems. Access to online library catalogues presents few problems, but access to databases of periodical citations is not so simple and Open Learning student access would be restricted to citation databases mounted on library catalogues and those available by dial-in access to CD-ROMs. Electronic full text delivery of printed materials could be utilised. Electronic transmission of scanned documents using a system such as the Ariel workstation would be possible, particularly to access centres for collection by students. It is unlikely that many individual students would have access to the appropriate laser printer and Ariel software required. Ariel has been used extensively in North America to transmit copies of articles over the internet (Jackson 1992 and 1993). In the Australian situation Ariel has been shown to be cheapest way of sending documents from one library to another (Kosa and Tucker 1993).

In some cases electronic access to library catalogues can also be used for requesting materials. For instance external students dialling in to the Innopac library catalogue at Deakin University can use Innopac's request facility to place delivery orders for materials they locate on the catalogue.

CONCLUSION

The development of a satisfactory system of providing quality library support to OLAA students poses many problems, particularly in view of the inadequate levels of funding available. The potential demand for library services is, at this stage, difficult to estimate. In fact, the likely demand for study through the OLAA in future years is very much an unknown quantity.

By the end of 1993 we should be able to answer a number of questions regarding library support.. Which libraries other than the provider libraries have joined the OLAA network? Is the voucher scheme operating effectively? What is the extent of the demand for library services, both at provider libraries and at other participating libraries? What has been the effect on public libraries?

Statistics gathered during the year by the provider libraries will enable a more accurate costing of their services and will provide a sound basis for reviewing charges. It is the intention of the provider libraries to set any fees which they charge at a level which make their services to OLAA students revenue neutral.

The OLAA is commencing at a time of technological innovation. The proposed open learning electronic facilities network is an exciting new concept which has great potential for facilitating access to libraries and their resources. For librarians responsible for providing service to OLAA students there are many challenges, not the least of which is ensuring that the students receive quality library services.

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Library Services to Distance Learners In Third World Countries: Barriers to Service

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INTRODUCTION

The provision of library services to distance learners is singularly the most important service issue to face the profession within the last decade. The existence of this new, and steadily growing clientele will change fundamentally many aspects of our profession. Far reaching changes will occur in how we interact with our patrons, what we do for them and what modalities we employ to assist us in our activities to get information to those who require our services.

While many administrators and indeed, some librarians see distance learners as irritants the stark reality is that distance learning will not go away. Distance education systems will continue to expand and grow. As new courses, previously not thought of as being 'suitable' for distance learning begin to be offered the words of Jevons (1989) will come to pass. His prediction "that distance education will continue to rise in status and expand in scale and ... that it should not regard itself as a minor specialty but as a leading edge of progress for ... education as a whole" is not without major significance. (24)

Library and information services occupy a critical and pivotal role in the process of education. Kascus and Aguilar (1988) state that "library support is an integral part of quality education and a vital service which should be available to all students" (29). Partridge (1988) looking at the issue from another perspective says that "without libraries the whole process of education and research would grind to a halt" (5) and Siri Sharma - a Vice President of India - is purported to have said that libraries can survive without educational institutions, but that educational institutions cannot survive without libraries. Philip Plumb, President of the Library Association (UK) provides another opinion. In a speech delivered on Members' Day he recalls how a Chairman of a Polytechnic Governing Body whom he describes as a very experienced and dedicated local politician is credited as saying that at a pinch we could do without much of the teaching staff but not without the library.

The importance of libraries to education therefore is well established.

The role of education as one of the principal vehicles of development is well documented. However, the cost of developing traditional systems of education places an inordinate strain on the financial resources of many third world countries. Thus, it is necessary to pursue and implement alternative strategies of education.

DISTANCE EDUCATION

Distance education is the process of learning whereby students are separated in time and place from their tutor, institution of instruction and fellow students. How to effectively bridge this distance is the most important challenge that faces distance education managers. This challenge becomes even greater with respect to satisfying the library and information needs of distance learners generally and within the third world in particular.

A brief description of the third world enhances our understanding of third world education needs. This understanding will also elucidate the important role that distance education can, must and will play to satisfy national education needs.

THE THIRD WORLD

The Encyclopedia of the Third World informs us that the third world comprises 49% of the world's land surface and 51% of the world's population. Most of these countries are poor. Many third world inhabitants live in chronic or absolute poverty. Life expectancy is about 16 years lower than that in developed countries and infant mortality is four times higher than in developed regions.

With respect to education Kurian (1987) indicates that over 850 million third world peoples have no access to schools and that the number going beyond primary grades is small. While the third world has experienced many educational developments and advancements, illiteracy and a lack of educational opportunities abound. The fact that only 52% of third world peoples can read and write as compared with 99% in the developed world attests to this.

The effect of disasters in the educational systems of the third world must be noted. Hurricanes, typhoons, earthquakes, famine, wars and pestilence have all had a detrimental effect on the educational systems of the third world. Distance education has played a part in the provision of education in such circumstances. The use of distance strategies in many parts of Africa which have experienced a range of disasters supports the point.

LIBRARIES IN THIRD WORLD COUNTRIES

Third world library services lack the depth, breadth and sophistication that exist in library systems in the developed world. Reasons for this include the oral (rather than literary) tradition of such societies; the repatriation of significant documents to the metropole during colonial times; the under-development of support services for educational systems within such societies and the under-development of social and cultural services - which includes libraries.

Partridge in his book *Low Budget Librarianship: Managing Information in Developing Countries* provides additional useful insights into the profession and practice of librarianship in the third world.

Describing the profession and professionals in the third world he expresses many of the difficulties that are encountered. Among the factors he cites are that librarians in the third world often work in lonely conditions; frustrations are a reality; resources are difficult to come by; funding is insufficient; the pool of professionals working in librarianship is small; the training received in developed countries is not always appropriate to third world needs; training in third world countries is often not appropriate to the needs of development and the fact that when library associations exist in such countries they operate as 'social clubs' rather than being on the cutting edge of development.

With regards to distance learning in particular the profession and professionals in the third world therefore, have to a large degree not met the many challenges that distance education has occasioned.

DISTANCE LEARNERS LIBRARY NEEDS

Jagannathan (1989) in writing about distance learners in India categorizes the library requirements of distance learners into three broad categories:

○ the need for materials and facilities;
○ the need for information services; and
○ the need for user services.

This illustrates that the specific library needs of distance learners in the third world do not differ from the library needs of conventional students in any system. What makes these services very different is how the services are managed, accessed and delivered.

In conventional systems, students are expected to go to the library. In distance systems, the library needs to go to the student. In conventional systems, the strategies used to deliver information assume that the student will come to the information source. In distance systems, strategies to 'take' the information to the students need to be initiated and deployed.

The creation of proper library services to such clients is based on many factors.

All distance teaching institutions need to develop an institutional philosophy that supports the entrenchment of library provision. Specific references to the provision of library services to distance learners is needed within the mission statement.

To support the goals articulated each and every distance teaching institution must make available adequate financial arrangements. Without adequate financial support, the infrastructural requirements of a library service at the managerial, personnel, facilities, resources and services levels will not be available.

BARRIERS TO SERVICE IN THE THIRD WORLD

There are many factors militating against the development of library services to distance learners in developing countries. As a result, these learners encounter many disadvantages with regard to satisfying the information needs of their programmes of study.

PHILOSOPHY

A comprehensive statement on the provision of library services is not usually included in the mission statement of most third world distance systems. This omission is the greatest obstacle in the provision of library services at such institutions.

Citing her South Pacific experience Williams (1986) sees the issue thus:

> the first concern is that for many extension studies the planning, developing, and writing of courses are totally isolated from any consideration of [the] availability of library resources... (58)

Continuing, she states another but related concern as being that

> there is a school of thought that believes that library services and resources for the distance student are not necessary. (58)

Allied to the question of institutional philosophy is the placement of the library within the distance teaching enterprise. Information supports learning and teaching. However, many perceive library services as an administrative support function, rather than properly as a component of the teaching/learning process. This affects in a fundamental way how the library will operate within a system. (Kinyanjui 1992, 3).

MANAGEMENT

The institutional arrangements to manage a distance library service are important.

Issues such as whether the distance service is incorporated into the mainstream of the management structure of the principal library of the institution or whether the service is delivered on the basis of personal interest are critical.

The relationships between the institution's administration and the teaching staff also affect the management of distance library services. The attitude of the Chief Librarian towards the practice of distance teaching is also of significance.

It must be noted however, that where institutions are concerned purely with distance teaching, clearly defined systems and structures are usually put in place. It is at the level of operation that significant differences occur.

FINANCE

Finance to support library services is a critical requirement. Without financing there can be no service and without adequate financing the range and quality of service available will be limited.

Libraries in third world countries face considerable financial difficulties. One of the most important constraints is access to foreign exchange. Hard currency regulations affect the acquisition, through importation, of locally unavailable materials, resources and equipment - particularly specialized library furniture and fittings.

The ability to purchase information from its source of production is an important activity in the delivery of library services. Up-to-date, accurate and reliable information is the basis of any good information service. If the necessary materials are not acquired, the training, learning and developmental needs of a country will be negatively affected. This is the experience of third world libraries.

Low levels of financing also affect the manpower, facilities and recurrent costs needed to support such a service.

Compounding the issue is the cost factor of library services generally. The notion that distance education is a cheap and quick way for third world nations to provide education leads to the practice of underfinancing library services.

In many third world institutions new services are added to existing operations without any specific or additional financial allocation being made. The delivery of library services to distance learners is no exception. In situations where the institution provides distance teaching only, finances to provide a proper level of library service is seldom provided. The assumption is (as in developed countries) that distance students will get their information services supported elsewhere.

This assumption is flawed because third world library services, at any level, are not as developed as similar services in industrialized countries. Hence, the assumed additional support from public, special and other educational institutions is either non-existent or minimal. This makes it imperative for distance teaching institutions in the third world to make adequate finance available for library support.

PERSONNEL

The quality of a library service is to a very large extent based on the personality of the individuals who operate that service. This is particularly true of distance services because immediate and direct contact with the clientele needing the service does not readily occur. This circumstance supports, on the part of library practitioners, a lack of understanding and empathy towards distance learners and their particular needs.

The absence of a large cadre of professional librarians in third world countries is another issue. Many persons in third world countries feel that anyone can run a library. Hence, the highly qualified post graduate librarian who is able to participate in an on-going programme of continuing education is not readily available in the third world. They are the exception rather than the norm.

The inability to fully grasp the particular requirements of distance learners library service is in part due to the absence of formal training in this aspect of the profession. Hence, librarians required to deliver library services to distance learners approach this type of service from a traditionalist stance. While these skills are fundamental to the profession, new and innovative measures must be created in order to serve these clients.

Traditional training assumes that information seekers will be always able to come to the library - except in special situations such as the hospital. Distance learners being often far removed from a library of any type require therefore that the library comes to them - in any way that it can.

In institutions that offer both conventional and distance programmes, professionals required to man the distance service often view this as the worst posting in the library. Feelings of isolation and frustration are often experienced by professionals working in distance services. The fact that such professionals are themselves distant from peers and colleagues who work in similiar services foster such feelings.

In mixed-mode institutions, the distance service is often a one person operation (at the professional level). This can lead to the marginalization of the service and professional.

Factors such as the of lack of status, low esteem, negative stereotyping, the perception that librarianship is a woman's job and poor working conditions all affect the profession in general and distance services in particular (Brewerton 1993; Norman 1992; *Assistant Librarian* 1993).

RESOURCES

Detrimental to any library and information service is an under-resourced facility. Adequate resource provision is the *sine qua non* of a quality service. Many third world libraries have old, outdated and poorly organized stocks. Further, many of these systems are print-based and print bound. Thus, many of the 'newer' forms of information presentation such as films, videos, slides, CD-ROM discs, microfilms, electronic databases and other telecommunications forms of information are not readily available.

This is a stark comparison with distance services in developed countries. Within developed countries all types of telecommunications and electronic devices, systems and services are used in distance services. Additionally, many students in developed countries posess their own telecommunications systems. Television, computers with modems and cheap telecommunications systems are regularly used by non-third world students.

Many third world distance learners do not have electricity in their homes. Computers and all other types of electrical and electronic based systems are therefore not within their reality.

SERVICE

User service is the most important activity of a library system. While distance students have similar needs to conventional students, the mechanisms to satisfy these needs are necessarily different.

Consideration therefore must be given towards the different delivery strategies that are available in third world countries and which can be used to the library's advantage. The absence of the widespread availability of modern methods of communication and telecommunication have been noted. Additionally, where these services are available the cost factor places high level utilization outside the budget of most libraries.

The postal system in many third world countries is poorly developed and unreliable. Thus while the postal service is used, recognition must be made that it will be prone to delays and losses. Overnight delivery cannot be assumed.

Local conditions lead to novel adaptations - e.g. the boat in the South Pacific and the train in India. Within the Caribbean personal use has been made of friends and airline personnel who traverse the length and breadth of the region on a daily basis.

That third world distance learners library needs are marginalized, cannot be discounted. Suitable and sufficient materials, adequate professional guidance, the opportunity to develop information gathering skills, access to functioning equipment and facilities to support staff activities and student use, where applicable, are not readily available.

COPING STRATEGIES

Barriers notwithstanding, distance learners are a reality of the third world library landscape. As professionals, therefore, we must do all that we can to provide the best library and information service possible. One must initiate, create, develop and pursue strategies that afford the delivery of information regardless of its format, location of the user as well as any physical and temporal limitations that exist. New procedures, as well as modifications to and adaptations of existing approaches must be vigourously pursued and instituted.

Librarians in the third world must be become proactive in many spheres. Developing a high visibility and anticipating developments rather then responding to the initiatives of others are but some of the ways that distance learners will be better served.

Store's (1980) edict that a new triangle of relations between the student, teacher and librarian must be followed. Through the development of new links and bridges librarians must forge new and better networks with administrators, public officials, policy makers and planners, educators and distance students. The establishment of connections with the private sector to support library activities should also be pursued.

Another link that must be nurtured by librarians in the third world is with the political directorate. Libraries and librarians have traditionally had very low political profiles. Comparisons between social services such as schools, water and libraries have led one writer to state that libraries do not get votes.

Librarians, particularly in the lesser developed nations, have a major public relations job to perform. They must educate their societies and particularly national policy makers on the vital role that libraries play in education, long-termed and sustainable development and the overall contribution that information makes to a country. Development is information dependent. The use of distance education as one of the strategies to aid development mandates the availability of quality library systems to support distance learning.

Librarians must make every effort to ensure that whenever distance systems are being planned and developed that library services and resources are an integral part of such systems. Intervention at this level is the best way to ensure that distance learners information needs are being adequately provided for and appropriately represented.

The development of conduits between the librarian and the distance student is paramount. Strategies such as newsletters, flyers, piggybacking on the other communicators in the programme and using the mass media are some of the ways that can be utilized to reach students. Other key players in the distance programme such as local tutors and other support personnel must also be reached. Librarians must embrace every opportunity that is idiosyncratic to their local environment to reach their users and benefactors.

CONCLUSION

There are many barriers affecting the delivery of library services to distance learners in third world countries. While a number of these factors are not peculiar to developing nations, what is unique is the combination of obstacles. These are inherently third world. While the eradication of many of these barriers requires long term sustained action with concomitant support and appropriate responses at all levels, changes can occur. Improved services are possible, even within existing constraints.

Librarians in third world countries are charged with the responsibility of deploying every skill which they have garnered during their training to the advantage of their clients. Satisfying distance learners library needs must come within the ambit of this responsibilty.

Information provision is what we know best. Its employment to the benefit of the distance learner, our profession and for the ultimate well-being of our societies is what our profession is about.

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Common Ground: Using Computer Mediated Conferencing to Create a Community of Researchers and Writers

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In much of the literature on distance teaching and library usage it is often suggested that encouraging, let alone requiring research on the part of students is difficult. Additionally in recent years distance education designers have tried to encourage collaborative models of learning by enriching courses through providing audio or video tapes, telephone contact between student and instructor, or by placing students into groups at a particular site and conducting discussions through interactive video equipment or tele-lecture equipment. These processes are often expensive and the technology is known to break down. Therefore distance education has more often than not, even when it uses the new learning technologies, reverted to the basic pattern of interaction between student and teacher as a person to person contact. This is often an isolating experience for the student.

It is our premise that research and writing cannot be done successfully in such a vacuum and that new collaborative and facilitative models of teaching and learning incorporated in the on-campus classroom need to be available to off campus students and teachers. We also believe that computer mediated teaching can increase in the words of Janet Eldred, the "connectivity" of the writing and research experience, making possible a social context for writing and research by linking terminals, individuals, sources and data bases with groups of writers (Herrmann 1991, 154). Hence we have developed a team taught research/writing course that combines conventional teaching techniques from the person to person classroom along with the use of educational technologies to access information and provide computer mediated conferencing (CMC).

The course development detailed below demonstrates how to combine library instruction and writing instruction in a distance education course in writing and research methods. First we will describe the institutional structures in which we worked; then the old forms of the course; and finally the new course which uses CMC to engage distance students in processes of research and writing. We believe that the new course is one way to solve two problems of distance education at once: the need to create a community of learning partners at sites where the class does not meet with the instructor on a regular basis and the ability to empower all students with access to research materials no matter their distance from an academic library.

COURSE BACKGROUND

Linfield College is a small comprehensive college in Oregon with two campuses and a total student population of 2,582 (Spring 1993 head count). Adult learners in the Divison of Continuing Education (DCE) participate in the degree programs at seven different sites in Oregon and one site in Washington. The DCE program began in 1976. It is unusual for a traditional small liberal arts college to have this kind of extensive distance education program to serve an ever increasing large number of adult students (Fall 1992 head count enrollment: 940). This program, as well as the college's nursing school, did not grow out of sheer altruism however. Due largely to fiscal realities and demographic projections for higher education, administrators at Linfield foresaw the opportunity that distance education presented to Linfield. (Critical to this equation is the non-interest in distance adult education by the public system of higher education in Oregon.)

Seven of the eight DCE sites involved use the campuses of local community colleges for Linfield classes, so there is a natural funneling of students to Linfield to finish their last two years of college course work. Agreements have been drawn up between each community college and Linfield. Library services were sometimes touched upon within these agreements but only to the extent of providing local library cards to Linfield students and interlibrary loan transactions. Three sites have university libraries in the community; one of these universities is a land grant institution and thus open to all people. The other two universities pose varying problems of access for DCE students.

Once the program was initiated and enrollment grew the staff at the McMinnville (main) campus library early on raised questions about the expectations for library use by DCE students. Northup Library has two strong parts to its mission: the maintenance of a collection that "supports teaching, learning, and research" and "teaching and helping students, faculty, and staff to identify and use intellectual resources effectively". For years the library staff attempted to do some miminimal work to support the DCE program.

In 1989 a new professional position was approved, 1/3 of which was to be devoted to the administering of library services for DCE students. The position was envisioned as focusing on delivery systems for students as well as positive ties to local libraries at each site.

The literature of extended library services seems to focus primarily on delivery systems. As Helen Modra so aptly put it in her article (referring to her work in Australia), "[long distance library service] was seen by perhaps most of its practitioners as being about delivery systems rather than about adults learning and changing"(Evans and Nation 1989, 125). As a librarian committed to teaching people how to best use these systems, the Reader and Extended Services Librarian became involved in the Exploring Language II class, a course in writing and library research. After a year of careful study of local library services and the course offerings at various DCE sites, it became apparent that DCE students were often perplexed and isolated in their attempts to find and then write up the information they needed for assigned research projects in their various courses.

Linfield's DCE program has tried a number of methods to ease the isolation of distance students through the use of educational technologies in the delivery of courses. While such technologies have been successful in lecture/discussion oriented courses, they have not been extensively used in the teaching of writing and research where successful learning often occurs through interaction with technology (e.g., online catalogs or indexes on CD-ROMS) as well as with peers and faculty. This has been especially true in the Exploring Language II course which has been taken by about two-thirds of those graduating from the program in the last three years.

OLD COURSE

This course requirement has existed for five years and is now one of the most important ways a student is introduced to the exploration of an academic research topic in a systematic way and to the demands of research writing. This course has become a requirement for most students who enter the program with little experience of academic research and it is now recommended to be taken early in the DCE student's program. This was done so that students could improve their ability to research a topic within an academic library; place a topic within the context of other research, develop critical thinking skills, and write a persuasive paper. The course was seen as practical, in that it stressed hands-on experience in a library, and the production of a 12-15 page research paper on a topic of the student's choice at the end of either 10 or 13 weeks. The course has been taught at a number of off-campus sites in the state and has developed three incarnations: one, the regular three to four hour class one night a week, the other as a weekend format for Summer and Winter terms and finally as a guided study course (similar to an independent study).

The current pedagogical model for this course consists of either two weekends of intense activity on the main campus or several classes at one of the off-campus sites, using either a community college library, a local public library or brief visits to academic libraries in the vicinity. In the weekend format at the main (McMinnville) campus, the participation of the librarian has evolved from a few hours in the first years of the course to the equivalent of one full day of instruction which focuses primarily on tools. It has gradually become apparent to the instructors that even this amount of library instruction, combined with some inidvidual attention, did not satisfactorily respond to the students' needs.

Several issues always presented themselves during the weekend or during the brief visits students made to libraries in their local area. For one, many students could not adequately respond to the initial point of entry to library instruction: reference materials. This is an ideal place for most students to begin because they are forced to read background material and start considering words and phrases which will link them to sources, subject indexes and specialized encyclopedias as well as to consider the context of their topic. But without time on the weekend to develop a fully refined topic or research question they often could not begin using reference materials adequately. And then, because of time constraints, no sooner were they introduced to reference sources then they were plunged into the increasingly complex computerized indices to journals and specialized books. We found in fact that many students were returning to reference books about halfway through the course to reestablish a broader base from which to work.

Similarly, students did not have adequate instruction in or time to learn how to use and understand the logic of the various databases in the library. At best they understood that it is imperative to use words and phrases both judiciously and creatively to facilitate search retrieval. But, in reality, spending two hours on online databases in general, in the midst of an already intense weekend, does not do justice to the power inherent in such systems. Rather than feeling able to navigate information systems in the library, students felt overwhelmed by the plethora of information. They had no time to return to a database with the guidance of a librarian and see their topic within that database's context or within the context of other database systems.

Furthermore we found that the student role in the course tended to be what Linda Flower has called the "text-processor role", someone who plans to summarize, review and comment, synthesize source texts, but with little active ownership of their topic, their sources, and their own writing (Flower et al. 1990, 224). Nancy Summers has defined the problem for the teachers in a course such as this:

> Many of the students who come to my classes have been trained to collect facts; they act as if their primary job is to accumulate enough authorities so that there is no doubt about the "truth" of their thesis. They most often disappear behind the weight and permanence of their borrowed words, moving their pens, mouthing the words of others, allowing sources to speak through them unquestioned, unexamined. (Summers 1993, 425)

This poses a doubly difficult situation for the librarian and teacher when they attempt with distance students in a weekend class to introduce the critical evaluation of sources and an understanding of bibliographic structure (Oberman and Strauch 1982, 111-12). For students to be able to work independently they need to have the confidence to trust their own voice vis a vis the authorities or experts who line the shelves or fill the databases in the library. The challenge for us in this course is to both enable students to comfortably navigate the systems as well as to think about what they retrieve. Databases, be they online catalogs or journal indices, pose another level of technological mystique which engenders awe and thereby misunderstanding in many adult learners. As Barbara Fister says "Students often locate authority outside themselves, in teachers, in books [and in machines]. Research, then, is simply a search for authority and a report on what it says" (1990, 60). How can we as teachers of research and writing show students how to demystify the process and how to transform the information into an expression of their own perspective on the topic?

In one weekend, to teach research in such a compact, linear way, we were able to focus only on the tools. This deprives the students of any realistic perspective on the actual research/writing process, i.e., on how topics evolve and change as you actually read and respond to sources. Also there is just never enough time to inculcate an understanding of the structure of all these various tools (reference, monographs, online catalogs, CD-ROM indices) or how to best exploit the information therein. The problem is that students often gain quick access to large amounts of information with little comprehension of how to control the burgeoning data. Thus the teaching of critical thinking with writing skills becomes that much more important as we attempt to develop in our students the critical literacy skills that require them to transform and not just recite knowledge.

NEW COURSE

The new and evolving form of the class takes advantage both of the face to face teaching and of computer mediated conferencing (CMC) in an effort to ameliorate the "individualistic, asocial process" of learning imposed by the sheer distance between students and between students and teacher when class is not in weekend session. By involving CMC it is our intent to create a community of writers/researchers and to enhance the process of learning. We believe as Modra again states that "... education for critical consciousness is a thoroughly social process requiring far more than the limited, one-on-one communication that still (...) characterizes distance education" (Evans and Nation 1989, 139).

The goals of the class remain the same: we introduce students to the process and production of a 12-15 page research paper, the research techniques of finding and evaluation of sources, the creation and evaluation of audience, the ability to search databases and other networks of information and the critical thinking that will give the student the confidence to find and use their own authority and voice in research and writing in subsequent Linfield classes.

The course begins at noon on a Friday. Introduction to the CMC on EIES is the first step. The afternoon is spent working with the EIES system - Electronic Information Exchange System - which they will be using when they are at home. EIES is available on the Oregon Ed-Net system. EIES is really no more than a glorified E-Mail system. You can create private and public E-Mail, i.e., you can create conferences on the system which students access through their home computers and a modem. This system works on both real time so you can have simultaneous dialogue or asynchronously which is the way we primarily use it. We then demonstrate how the student can have access to the course's three conferences: the writing and critical thinking exercise conference, the teacher/student questions and answers conference and the student to student conference. We spend Friday afternoon not only introducing the mechanics of the system but also carry on a real time discussion so students can more readily comprehend the kind of conference they will participate in from home. We explain how we are going to use EIES to supplement the person to person contact of the regular classroom and how that technology will give the students access to Linfield's online catalog, databases and other library catalogs.

Friday night we concentrate on freewriting, brainstorming and we establish tentative topics. To do this we use an exercise that combines writing with research techniques at the very beginning of the course. In this first writing assignment in their research journals they are required to develop a guiding question for their research. The question is built around a series of free writing exercises that require the student to list and then develop a letter to a friend which describes what intrigues them, what things matter to them, what subjects they have learned about, that have piqued their curiosity. We then use this to expand the question to what are the student's concerns about the world? Do you have particular opinions on the major questions of the day? Can you state your concerns in a concise statement that suggests to you a way to read and write about it? For example, how do we restructure our attitudes about our place in Nature so as to live in a way that prevents further destruction of the environment? This all moves to having them write a possible guiding question for their research.

We then have students read each others' writing - interview each other about their writing and guiding question - a series of written questions and then writing upon their own version of the interview. (They are enacting the reporting on research through writing that is one paradigm for the course.) Friday night we give the students the assignment for the next morning: bring a brief description of their topic to class.

Saturday morning we meet in the library and look at using the same list making, free writing and brainstorming activities to develop words and phrases for topic analysis, natural language searching and controlled vocabulary searching. Our intent is to show students the symbiotic nature of the two processes of writing and research and that they can think into writing and write into research.

We introduce reference sources in the morning and emphasize the contextual value of background sources and how these materials can serve as a link to a vocabulary which will be useful for further research tools. We ask that they continue in their research journals by responding to a specialized encyclopedia article in writing. We ask that they notice and write down words and phrases which name their topic and that these words and phrases also begin to shape their topic. We begin to introduce the notion of audience and expert also. Who is a particular encyclopedia talking to? Does it matter is an encyclopedia is alphabetical or topical in organization? How do you use a work you are not familiar with? Who is writing the article? Who is publishing the information? Librarians and faculty forget that students of any age do not view research or writing as "second nature" to themselves. By focusing on questioning the sources at the first library-centered class students "can [begin] to understand that every piece of information comes from a specific frame of reference and represents truth only in that frame of reference. They can begin to feel comfortable questioning all sources of information they encounter" (Wesley 1991, 24).

The Saturday afternoon session is spent introducing the concept of natural and controlled vocabularies which leads to online catalogs, LCSH, and CD-ROM indices. Taking as a sample topic the theory that the experience of American women during WWII profoundly affected the later feminist movement of the 1960s and 1970s, the students are introduced to how different databases treat this complex topic. Which words and phrases pull up books and articles which touch upon this topic? How do the different CD-ROM indices differ in perspective? We use an LCD plate to project on a screen citations from different kinds of databases relating to the sample topic of American women during WWII. We ask the students to simply make observations about what they "see". What students see but cannot decipher is extremely important, becoming a valuable lesson in research methodology when they move from the natural language of their own search strategy to the controlled vocabulary of a database.

We then ask the students to develop their own guiding question. Sunday there is grazing time on the CD-ROMs and time for individual consultation. In the afternoon we return to EIES for real time conversation. We ask the students to write a summary of one of their sources and then share that with one to two of the conference participants. The exercise and "talking" the students do, using EIES, gives them much more self-confidence as they leave campus for their home computer and modem.

For the following four weeks we all communicate via EIES. The students return home with an understanding that the writing and research activities can be combined in creating a guiding question. We then move the students toward refining that question through the recursive process of observation and inference, both within the context of search strategies and within the writing process itself. We give them the opportunity to write summaries of a chapter from a book and at least one article they have found; asking them to pay careful attention to the intended audience, the forms and methods of presentation, as well as the content.

This leads quite easily into an evaluation of sources and the complex rhetorical problem of audience analysis when evaluating research material and writing it up. Who is the intended audience of a weekly magazine? A quarterly journal? How do we tell the difference? Can we ask the same kind of questions of sources that we ask about the audience of our papers: What is their knowledge of the topic; what are their attitudes toward the topic; and what do they need to know to comprehend the material their source is presenting? We want students to be reminded yet again of the interconnection between writing and research, between understanding that the process of audience analysis in the preparation for research writing has much in common with the process of source evaluation.

The same type of writing exercise is used two weeks later to discuss evaluation of sources. Because the various library catalogs and databases are available to the students through their modem they can now take a second pass in the process of retrieving information without going to a library. We have found that this second pass improves the yield, both of the students' understanding of the complex online systems as well as understanding the inherent nature of refining and contextualizing a research topic. As Carmen Schmersahl writes in the *Journal of Teaching Writing*, "We can more profitably teach our students to use library research if (...) we first treat research as part of the recursive generative process of writing and so encourage students to see that doing research (..) is also a recursive process of discovery" (1987, 232).

By the third week of the course we have moved through the stages of identifying a topic of interest, articulating a problem or guiding question, and formulating a hypothesis or thesis statement. Now the research journal and conference conversation focus on devising a test of the thesis by reading existing research, evaluating sources and understanding the conventions of the field in which the student has chosen to write. CMC allows us to ask for more written work: students can load examples of summary, synthesis and personal note-taking -- leaving us room for comment and suggestion. The whole emphasis here is to encourage the student to enter into written conversation with their sources (Flower et al. 1990, 22) and to understand that the process of writing and the process of research are one.

Distance students, who often begin the process of research by seeking information based upon experience, are encouraged to supplement experiential understanding with published information. In the process, they submerge their own voice and authority in the borrowed words and perspective of new authorities. They often disregard the sources' class, color, age, historical situation, or gender when it differs from their own:"disregarding these indicators of point of view, students frequently succumb to the culturally appropriate response to reading--that is, they believe what they read. Equating information with knowledge, students tend to give up their perspectives for the published ones" (Huston 1987, 91).

Another condition encouraging critical thinking and reading is to have students become aware of the contexts and sources of various researchers' knowledge claims. This can be brought to students' attention through CMC by having students ask a series of questions of the opening page and one half of any article they read for their paper. We like to have students ask questions about source evaluation by having them look at the ways in which scholarly texts explicity contextualize their arguments and research claims in the work of others. We want students to begin to understand the ways authors ground their own texts in previous texts in the field, and this can be done easily through studying introductions "where an author briefly states the present position of research on his (her) subject and the views currently held on it" (Reither 1990, 252). When combined with an exercise on source evaluation, we begin to introduce the student to the material in the last third of the course. Here we emphasize how they need to recognize the complex, rhetorical situation of the research paper, the conventions of presentation and organization of the community the researcher is attempting to enter, and the empowering and difficult process of writing in the context of authorities in a field. The recursive structure of the course should now be apparent as we prepare for the students' return to campus for a second weekend. They are to have a rough draft of their thesis statement, an introduction, and two to four pages of text written, along with a listing of the sources they have consulted.

Each student returns to campus with the expectation of a one hour conference on their paper with the two teachers in the course. At the conference they have to read their paper aloud. The object of this exercise is to have the student hear his/her own voice, both textually and literally, so that they can have the immediate experience of the complex problems of textual/personal responsibility and authority. They are questioned on the source material they have accumulated and we encourage them to take another pass at periodical indices and secondary materials on their topics. They then give copies of their paper to two other members of the course for reading and comment. The effect of such activities is to have the student become aware of audience expectations and citation conventions as well as creating a community of readers, writers, and researchers which will work together for the last four weeks of the course. We then supplement this brief fling at an on campus community by using learning partners, through CMC, to act as an audience, a community of complaint, a resource and motivational force as the students prepare the final draft of their papers. The teachers do not give any new learning activities and encourage all conferencing to be done within the students' discussions which are monitored by the teachers. Now we, as teachers, are slowly, carefully moving away from defining the conversation. We want our students to give expression to what they know in their own voice, and to demonstrate in writing, that knowledge can be transformed to let them enter into the ongoing conversation of a field or a discipline.

This is not to say that we do not answer questions, provide additional perceptions of problems of research or writing, but it is to emphasize that we now want the students to work on the problem of interpreting source texts for a purpose of their own. Students respond to each other's questions and texts. Because of the trace function on EIES students can follow a particular conversation from beginning to end and can enter at any time. The convenience of the asynchronous system fits in well with adult students' lives because they can enter into the class at any time from their home or work. They can also choose when to respond whereas in classrooms there is a time framework to consider during any discussion. Students' responses often are more thoughtful over CMC because they can think about what they will say and because they have to think into writing. So writing again becomes an integral way of response in this research/writing class. Students can take the time to think about what to say in response to someone's text.

EIES facilitates the change from a teacher-centered classroom to a student-centered classroom, something appreciated in particular by adult students. These conferences permit us, the teachers, to step back a bit from our role as authorities in order to give them the latitude to experience dissonance, uncertainty, and even contradiction. Our impulse is to mediate, and we do at times, but with the support of CMC we can give the students greater freedom to fail, with the caveat that we can read over their shoulder.

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Bibliographic Instruction Without Being There: Using Job Aids for Off-Campus Needs

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OVERVIEW

As conference attendees, you rely on job aids. Consider a few examples: the hotel registration form that cues your checking in, the conference program that guides your daily planning, the hotel signs that help you get where you want to go, and the labeling on your telephone which ensures that you dial the correct numbers. Although simple and basic, these examples share purposes with the more professional job aids this paper will discuss.

What have these examples in common?

- Each guides a task or series of tasks.
- The guidance is very specific.
- The guidance serves in lieu of training or coaching.
- The job aid replaces the need to remember. (Imagine something so routine as dialing out of your room if the telephone keypad were not labeled, or information on how to dial long distance and between rooms were only given orally when you checked in.)
- The job aid is available at place (and thus time) of need.

Job aids, sometimes called performance aids or job performance aids--or cheat sheets--were developed by trainers coping with situations where employees were unable to perform properly procedures they had once known how to do. These activities tended to be complex in nature, infrequently performed, and/or imperfectly learned in the first place. Such situations lend themselves well to reliance on job aids, which cue performance. It was a logical step to train staff to do the most frequently performed tasks, and prepare them to refer to job aids as needed for occasional tasks. In other words, it is not necessary to train employees to do everything they might need to do, but trainers can set up an environment where the needed task information is readily available. The performance of tasks for which there is training can be backed up by job aids.

The job aid concept can be used with library staff, as with other employees. However, the focus of this paper is on bibliographic instruction: making available instruction/guidance to the library user/information seeker at point of need. This is not a new concept to librarians, who long have relied on printed and point-of-use instruction. Examples are pathfinders, signs that label the reference desk, lists of call numbers and their locations, and the diagrams on microform readers; more recently, interactive computers allow users to get acquainted with the library via a visual "tour". This paper will also highlight some sources useful to the reader seeking more information on job aids.

Let's apply that earlier list of characteristics of job aids to one that we used to see frequently: the instructional card in each drawer of the card catalog that helped the user make sense of the catalog and its entries.

Job aid characteristics	Applied to instructional card in catalog
Guides a task...	The card interprets the meaning of entries in the catalog.
Guidance is specific	A diagram labels author, title, publisher, call number, etc.
Guidance serves in lieu of training	Anyone who can get meaning from the job aid.
Replaces need to remember	Whatever the user's instructional background, the job aid shows how to figure out the catalog entry.
Available at place of need	There is an instructional card in each catalog drawer, flagged and labeled.

Incidentally, consider how automated catalogs and databases have taken on some characteristics of the job aid. You don't need to know where to look for an author or title entry; each is labeled. Screen commands tell you what your options for action are, and help screens are available to anyone wanting more detail.

The thesis of this paper is that the job aid concept is a useful one, with far greater potential for bibliographic instruction than we have begun to exploit. There will never be enough time to teach library users all we think they should know. Even if there were, clients will not necessarily absorb the information or recall it when needed. We can provide effective job aids for situations where people need information and guidance. Those who are motivated to learn have that option. Those who simply want to get a job done can follow the directions of the job aid.

TYPES OF JOB AIDS

I'd like to share with you five types of job aids (the list is not inclusive), keyed to examples of things we use Central Michigan University's Off-Campus Library Services (OCLS), and suggest some other possibilities. These job aid types are checklists, cookbooks, worksheets, decision tables, and flowcharts/algorithms.

CHECKLISTS

Your shopping list is an ad hoc checklist. The checklist emphasizes what needs to be done, rather than how to do each step. Checklists, whether or not literally checked off, cue people on the variety of tasks that need to be completed to reach a given end. Sequence is of some concern, but it is often unnecessary to do things in the exact order given. Nor need every item listed be performed. The checklist serves as a sort of coach. In connection with a workshop I do in class, I provide a Checklist for a Literature Search. Representative of steps are these:

This checklist assumes that you have chosen a topic, at least in broad outline.

○ Begin to develop a general understanding of your topic.
Check your textbooks and other professional books you own.
Consult specialized handbooks, encyclopedias, and dictionaries.
Talk with your instructor.
Talk with other people with expertise on your topic.

○ Consider what you need to investigate. List questions, subtopics to guide your search.

○ What types of materials might be helpful? Consider:

books
periodical articles
newspaper articles
government publications
technical reports
conference papers
dissertations
audiotapes
researchers
staff of companies
staff of government agencies
staff of trade associations
staff of professional associations
videotapes

○ Since most of your searching will be by subject, list terms and phrases that might be useful. Consider synonyms, broader terms, narrower terms, related terms, and permutations of terms. For example....

Some other examples of instructional checklists come from a recent LOEX publication, *Judging the Validity of Information Sources* (Shirato 1991):

a. Deborah Fink (Shirato 1991, 18) presents a four level look at critical evaluation: Becoming Familiar With a Piece of Literature; Understanding a Piece of Literature; Analyzing a Piece of Literature; and Assessing the Piece of Literature. Under each level questions are listed that guide the evaluation, e.g., "What is the author's thesis?" "Are the connections logical?"

b. A handout from Washington State University (Shirato 1991, 69), entitled Evaluating Sources for International/Multi-Cultural Information, lists six major points to consider (e.g., Country of Origin, Historical Perspective/Context), each with sub-points (e.g., "What audience(s) is the source intended for...?").

c. An Eastern Michigan University handout (Shirato 1991, 84) on rating textbooks, guides the evaluation by a series of questions, e.g., "Is reference made to language use other than English?"

Another good example is ALA's 1990 leaflet, called *Evaluating Information: A Basic Checklist*. The checklist format could be useful in determining whether an article is scholarly (e.g., title characteristics, presence of abstract, presence of bibliography and/or footnotes) or choosing a paper topic.

Pathfinders could be considered a sort of checklist, with a series of guided tasks that users may choose to follow in whole or part, whatever the order. Jarvis and Dow (1986) discuss development of online pathfinders, accessible in a catalog search.

At Central Michigan University's OCLS we make two other uses of checklists. One is a list of library services available, which has faculty and student versions. While used basically to publicize the service, these lists also inform the reader of what he/she can expect from us, and how to contact us.

Secondly, since our program is quite decentralized (we have over 50 sites across the United States, Canada, and Mexico), we have no way to display our numerous handouts. Consequently we provide an order form listing the handouts available. This is a literal checklist, in which students and faculty may check off desired items, and mail the form (postpaid) to campus. This checklist first announces that handouts are available from CMU, then lists each individual item, and allows for one-step ordering.

COOKBOOKS

The cookbook gets its name from the step-by-step approach to performance it provides. Unlike the checklist, which lists markers along the way, the cookbook gives specific directions on how to get to a destination. There are several cookbook job aids in my office, developed for staff and faculty reference. These aids deal with getting into--and out of--databases. Cookbooks are useful for linear procedures of some complexity, and as one-step reminders, e.g.,

> **Turn on the computer.**
> **To order specific documents, call 1-800 274-3838.**

The standard syllabus cover sheet used for Central Michigan's Extended Degree Program includes a cookbook of sorts, telling students that they may order items from the main library via an 800 number (given) or contact an Off-campus Librarian for reference assistance.

Here's a slightly more complex cookbook example, used for dialing into CMU's catalog from my office:

Accessing Centra

Turn on modem; set lower T-switch, if necessary. [The T-switches each have post-it reminders of what letter to set for which user.]

Set upper T-switch for printing, if necessary.

From prompt:	Type:
C>	**cd \kermit**
kermit>	**kermit**
kermit-ms>	**do ibm**
kermit-ms>	**connect**
[blank screen]	**atdp** 2022651088 *(local)* 5177747478 *(campus)*
Connect 2400	[return]
terminal =	[return]
which host?	**cmu-ibm-pw**
password	**8550lee** *[2 returns]*

enter terminal type **vt100** *[return]*

Cookbooks are especially useful for introducing library technology, which all too often sits in libraries without so much as a TRY ME sign. Oberg (1993, 265) paints a bleak picture of libraries with "confusing catalog data, inadequate signage, and unfriendly OPACs with too few help screens." Cookbooks are an answer.

To be effective, cookbooks must (in addition to the guidelines listed later) 1) include **all** steps in the procedure; 2) include those steps in proper sequence; 3) present each step separately; 4) define specialized terminology (if it must be used at all), preferably in context by formal definition, example, or usage; and 5) assume no prior knowledge on the part of the user.

WORKSHEETS

Worksheets, of which conference and hotel registrations are examples, are useful when the directions are simple, and include calculations or writing. Interlibrary loan forms are good examples of worksheets. The worksheet cues the user on what to write.

The library module I present in Central Michigan's MSA 600, Administrative Research and Report Writing, has evolved into a worksheet, which itself has evolved into an increasingly specific vehicle. For example, I no longer provide two blank lines and ask students to write the citation for a recommended book. First, not all students are familiar with the term **citation**. Second, students don't always know how to interpret the parts of the citation. The following format cues responses, and makes it easier for students to request guidance (e.g., Where do I find the number of pages?).

Check the library's catalog for the citation of a book that might be useful.

Subject heading consulted ______________________________
Author ______________________________
Title ______________________________
Publisher ______________________ *Date* ____________
No. of pages ____________ *Call no.* ____________________

Under what ***other*** *subject heading(s) is this book listed?*

____

A worksheet example from *Judging the Validity of Information Sources* (Shirato 1991, 36-37) combines checklist with workbook format. A handout on preparing annotations, from the McIntyre Library at the University of Wisconsin-Eau Claire, lists nine aspects of annotations, and asks questions under each that guide the writing. For example, under Conclusion Justification, the writer is asked if the conclusions are justified by the research or experience, if the conclusions relate to the original purpose of the research and the data, and whether there is bias. By dint of including space for taking notes or drafting each section of the annotation, the features of a worksheet are added to those of a checklist.

Other examples of worksheets are forms a client fills out in preparation for a mediated search (e.g., description of topic, keywords, recency of items sought, and maximum cost the client is willing to incur) and requests for assistance to be sent to the off-campus library staff.

DECISION TABLES

Decision charts/tables are sometimes referred to as IF/THEN tables. We use this format a lot in Off-Campus Library Services, for what we call research guides, developed for courses and for popular topics. The format I've evolved uses a column labeled **If you need** followed by a second one, **Then consult**. The first column has fairly obvious categories, such as Background Information, Article Citations, Associations, Government Publications, and Statistics. The second column then lists some fairly standard sources that can be helpful. In the case of periodical indexes, we even list some useful terms to search. See the Appendix for an example of a research guide; we have developed guides for all of our courses. In addition, we have guides on such topics as the military, industries, training, and law. The decentralized nature of our program means that we must give guidance that will work at the Fort Polk (LA) Library, the main branch of the Brooklyn Public Library, and the University of Missouri Kansas City.

Interestingly, Freed and Diodato (1991) use this form in *Business Information Desk Reference: Where to Find Answers to Business Questions.* The body of the book consists of two column pages. The left hand column is labeled WHERE SHOULD I GO TO FIND..., and the right column says TRY.

Decision tables can have more than two columns (IF/AND IF/THEN). You could introduce Boolean searching by a chart such as this:

When you know:	And you also know:	Then search:
Part of the title, (e.g., **management**)	The author's name (e.g., **Drucker**)	**k=management and drucker**
The general topic (e.g., **total quality management**)	That you want a recent copyright date	**k=total quality management and 1992**
The publisher e.g., (**Aspen**)	And the topic (e.g., **entrepreneurship**)	**k=Aspen and entrepreneurship**

The ultimate in decision charts may be expert systems, which draw on the knowledge and thought processes of experts, making available that expertise to any user of the system. Carr (1989) gives an interesting overview of the possibilities of expert systems as guides and as coaches, and mentions some software to use in developing expert systems.

FLOWCHARTS/ALGORITHMS

In *Encyclopedia of Education* (Good 1973, 92), a flowchart is defined as "a diagrammatic representation of a sequence of operations required to carry out some procedure; steps in the procedure are usually squares, circles, etc., with arrows leading from one figure to the next; of particular importance in making a flowchart is the insertion of instructions for making decisions and for repeating part of the procedure." By 1990, Burr (64) could state:

> The easiest and best way to understand a process is to draw a picture of it--that's basically what flow-charting is. There are many styles that can be used to draw a flowchart. Some people use pictures, some use engineering symbols, and others just use squares or rectangles for the whole diagram. There really is no right or wrong way to display the information. The true test of a flowchart is how well those who create and use it can understand it.

From these comments, we can see that flowcharts track/guide a process, and show decisions and repeating actions. Zemke and Kramlinger (1982) suggest that algorithms (flowcharts) are useful when tasks require a lot of decision making/branching (mostly of a yes/no nature), but utilize operations and processes that are not particularly complex.

Lineberry and Bullock (1974) say that flowcharts may be linear or branching. A linear flowchart would be similar to a cookbook in that both describe a one-size-fits-all sequence. The linear format allows for the inclusion of supplementary information and/or graphics. Lineberry and Bullock also suggest creating flowcharts by putting each step on a card, rearranging and adding cards until the sequence is complete.

Process flowcharting is a buzzword in the literature today, used primarily for understanding the total workflow--and seeing opportunities to make that flow more efficient. Process flowcharting could be useful to librarians in identifying more completely the steps in various search and use processes. What is second nature to librarians may require a complex series of skills unfamiliar to our users. The results of flowchart analyses would then direct job aids. For further information on flowcharting, see Golen and others (1986) and Donahue (1983). You may also want to investigate computer software for flowcharting.

A common instructional usage of the flowchart is to lay out the literature search process. We have used several forms of search flowcharts in our *CMU Library Guide*, the current version follows. In the guide, this is prefaced by a search checklist: 1) identifying the information need, 2) doing a preliminary investigation of sources, 3) focusing the topic; 4) gathering the information and beginning the research, and 4) making the presentation/writing the paper.

The automated interactive library directories appearing now near the entrances of some libraries are a variation on flowcharts, in that they allow several opportunities to branch. Users may choose from options that give detailed information. A user could choose to look over the entire library, a single floor, or the periodicals section. Hogg (1992, 16) tells of the use of hypertext for a procedures manual allowing users "to access nonsequential information through defined links between documents." Such a manual, available via modem dial-in, has particular viability for students away from campus. There are various software programs on the market for the creation of formal flowcharts, as well as hypertext software.

COMMENTARY

Although I have highlighted five types of job/performance aids, the concept is even broader and more useful than the examples given may suggest. The common denominator of job aids is the ability to put instructional information in a recorded form that effectively directs the library user's work. This may reinforce or it may replace instruction. Either way, the user's access to information is enhanced. The best single source that I have found for information on planning and preparing job aids is Lineberry and Bullock's *Job Aids* (1980); Snow (1989) is also very helpful.

What are some principles of designing job aids?

○ Be sure that the task lends itself to a job aid format.

○ Choose an appropriate medium to convey the information. For example, directions for dialing into a catalog would probably best be given by a cookbook, and troubleshooting lends itself well to a decision table: If the widget doesn't wonkle/Then. Sometimes signs are the most appropriate medium. For some information, any of several formats will work. For others, a combination of formats will be most effective. See Learning the Library (Beaubien, 1982, 46-49) for a decision table listing several forms of instruction, with pros and cons of each.

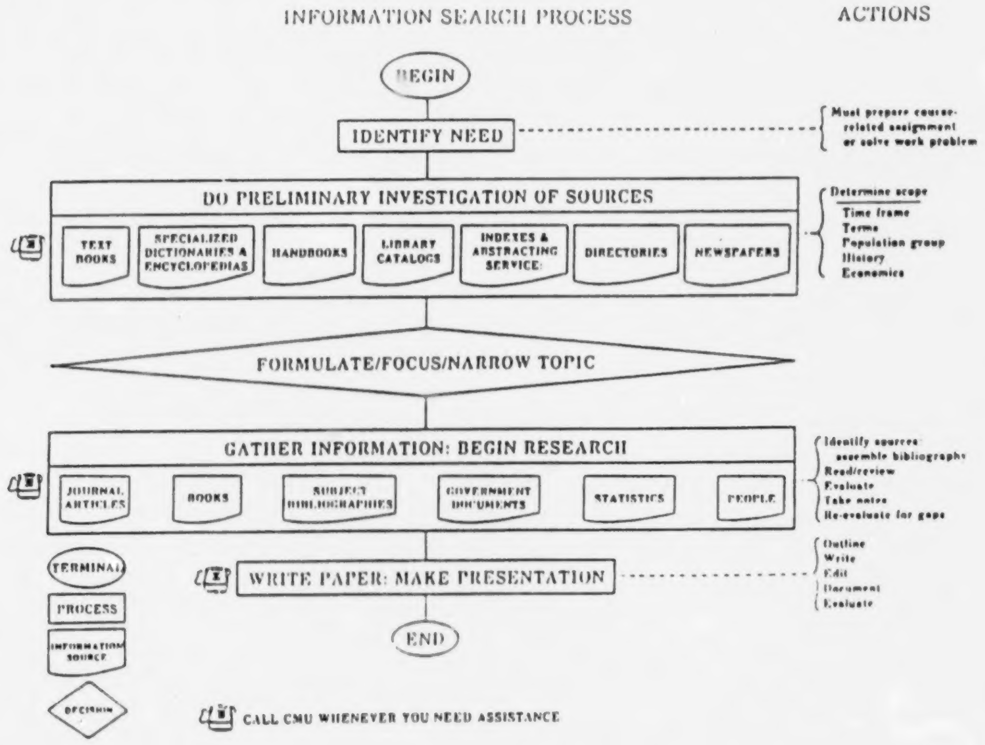
○ Label the job aid clearly. For example, a handout labeled ACCESSING CENTRA does not tell the user what Centra is, or why anyone might want to access it. SEARCHING CMU'S LIBRARY CATALOG would be more informative.

SEARCH STRATEGY

A search strategy suggests a sequence of activities leading to a well organized, well documented research project. The following flowchart shows the stages of this search process, which consist of

1) identifying the information need,
2) doing a preliminary investigation of sources,
3) narrowing the topic,
4) gathering the information and beginning the research, and
5) making the presentation/writing the paper

At each stage of this process, the thoughts and actions you would be following as well as the library resources you would use to identify specific information are identified. The subsequent pages of this library guide mention some specific titles which should be available in many of your local libraries.


INFORMATION SEARCH PROCESS
ACTIONS
BEGIN
IDENTIFY NEED
Must prepare course-related assignment or solve work problem
DO PRELIMINARY INVESTIGATION OF SOURCES
TEXT BOOKS
SPECIALIZED DICTIONARIES & ENCYCLOPEDIAS
HANDBOOKS
LIBRARY CATALOGS
INDEXES & ABSTRACTING SERVICES
DIRECTORIES
NEWSPAPERS
Determine scope
Time frame
Terms
Population group
History
Economics
FORMULATE/FOCUS/NARROW TOPIC
GATHER INFORMATION: BEGIN RESEARCH
JOURNAL ARTICLES
BOOKS
SUBJECT BIBLIOGRAPHIES
GOVERNMENT DOCUMENTS
STATISTICS
PEOPLE
Identify sources assemble bibliography
Read/review
Evaluate
Take notes
Re-evaluate for gaps
WRITE PAPER: MAKE PRESENTATION
Outline
Write
Edit
Document
Evaluate
END
TERMINAL
PROCESS
INFORMATION SOURCE
DECISION
CALL CMU WHENEVER YOU NEED ASSISTANCE

BEST COPY AVAILABLE

- Use vocabulary appropriate to the audience; avoid professional jargon. For example, rather than labeling compact disc indexes with overhead signs saying PERIODICAL INDEXES or PERIODICAL LITERATURE, say FIND ARTICLES ON YOUR TOPIC HERE.

- Present information systematically. Do not omit steps, or assume the user has background knowledge. A good example is mentioning that the equipment must be turned on, or PRESS ANY KEY TO BEGIN.

- Utilize the KISS principle (Keep it simple, Stupid): list, omit detail, use bullets, shorten sentences (if sentences must be used at all), use visuals when appropriate.

- Be sure that the use of vocabulary, system, and simplicity do indeed lead to clarity.

- Consider the appearance, as well as the content of the job aid. Use of such elements as page layout, print fonts, and color add to the usefulness of job aids. See Roberts (1989) and Burbank and Pett (1986) for some ideas on physical format.

- Test the job aid, first with staff, then with members of the target audience. Observe people during the test, so you can see where they have problems, and so that you can talk with respondents about their reactions--respondents are more generous with spoken than written commentary.

- Position the job aid where it will be of most use. Since you can't always have aids literally at point of use, figure out ways to prompt users on the availability of help and where to get it.

The ever increasing access to technology, while posing additional complexity for bibliographic instruction, also suggests some solutions. Assuming dial in access, job aids can be provided as part of that service, with immediate availability and updating. Ganger (1990) points to several kinds of online instruction: help messages that are truly helpful, reference guides that tell the user where to look in written documentation for needed information, formal job aids that cue tasks, and electronic brochures that provide introductory or overview information.

To pull this discussion together, job/performance aids:

- require careful development, but can be used in a variety of settings once developed, making them more efficient and effective than formal instruction or reference encounters. Pavelsek (1991) and Turner (1993) both speak to the efficacy of handouts that respond to client needs when reference service is limited. Gorman (1991, 356) implies the use of job aids in making libraries more transparent to users; he suggests that "the effort put into BI should be directed toward making BI unnecessary."

- equalize clients' access to instruction, and thus to information;

- can result in effective, reliable learner performance;

- do not rely on the vagaries of memory, practice, or access to instruction;

- satisfy learners, who get support when it is needed;
- help compensate for lack of bibliographic instruction, or limited or ineffective instruction.
- multiply instructional efforts;
- take less class time and librarian time.
- may increase motivation to perform, since the likelihood of performing effectively is increased.

Is it worth it? Earlier studies by trainers, such as those reported by Mockovak (1983) and Duncan (1985) indicate successful results with the use of job aids. At the observational/anecdotal level, we can all point to aids that have gotten us through tasks. Computer menus and help screens are predicated on guiding ongoing performance at time and place of need; formal training is not expected.

A better question than **Is it worth it?** is this: Can we afford **not** to provide job/performance aids, as part of a variety of activities to develop and enrich information gathering skills of our users?

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Implementing a Virtual Library for Off-Campus Students

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The University of St. Thomas Libraries currently serves approximately 600 off-campus graduate students in the areas of business, engineering, software design, social work, and education. Some of these students attend classes at one of two sites containing a small satellite library, but others (primarily those in education) do not. Students generally communicate with the extension librarian, Ruth Zietlow, by telephone or fax; materials are delivered to students via the inter-campus courier, U.S. mail, or fax.

For the past year, those of us involved in the extension libraries program at St. Thomas have been rethinking the way we provide library services to off-campus students. Changes at St. Thomas were the immediate catalysts, but technological innovations that have been occurring in the library world fostered the decision to create a virtual library for our off-campus students.

CONSIDERATION OF A VIRTUAL LIBRARY

The university started two new extension programs in 1993. One program offered a Master's of Social Work program at a campus where the small collection of books, periodicals, and indexes was devoted to the already existing MBA program; there was no room for social work materials. The MBA program added another satellite campus, and did not plan a space for library materials. Neither program had allocated funds within its start-up budget for additional library materials, and the library could not provide the funds for two entirely new collections. A renewed emphasis on encouraging off-campus graduate education students to use extension library services also added to the demand for remote access to materials and services.

While shifts in academic programs provided one impetus for change, so did the change in remote access to the libraries' online catalog. Off-campus students used to be able to directly access the catalog through their home or office modem, or by using a dedicated terminal at a satellite library. In the fall of 1992, however, the libraries brought up a new online catalog system, in which the catalog would be accessed through the campus mainframe (hereafter referred to as the VAX). Remote users would need a password to access the VAX; unfortunately, most off-campus students did not have access to the VAX, or the training to use the resources it offered.

Consequently, in the fall of 1992 our extension program was faced with several dilemmas. How were we going to provide basic resources and services for students in the new programs, and remote access to the library catalog? This crisis actually turn out to be a blessing in disguise. Providing off-campus students with access to the VAX has the potential of presenting them with a "virtual library" that they could use whenever and wherever they need to. The components to our virtual library, accessible through the campus VAX, would include:

- the online catalog, with online circulation and patron-initiated interlibrary loan; eventually it will provide access to services such as Uncover and/or FirstSearch
- an InfoServer, allowing remote users to search the libraries' networked CD-ROM databases via the VAX
- electronic mail service, providing another means for students to place research or materials requests, and allowing the extension librarian to disseminate newsletters and other awareness materials directly to users, and eventually use a scanner for document delivery (Bristow 1992; Still and Campbell 1993)
- the campus-wide information system (DISCOVER), providing access to library information (hours, news) and services (book orders, reference questions); eventually, the online catalog and Infoserver will be accessible through this service
- a connection to a multitude of other resources through the Internet.

This was our plan: to have a virtual library up and running by the beginning of fall term 1993, and that at the Off-Campus Library Services Conference in October 1993 we would discuss the end results of this project, and report on the successes and problems involved in its implementation.

We knew what the challenges would be. The extension librarian would have to work with the campus computing center in order to issue VAX accounts to off-campus students, and provide documentation, training, and technical support appropriate for off-campus users with different levels of computer competency, and different types of equipment. She would also need to develop methods (brochures, workshops, videos) of training the students in the use of the online catalog, InfoServer, and other library resources available on the system.

Unfortunately, the implementation process has suffered one set-back after another. As of June 1993, very few extension students had access to the VAX system, and fewer had been trained in the use of any part of the virtual library.

CHALLENGES IN IMPLEMENTATION

USER ACCESS

User access to the VAX system is a major challenge. Neither satellite campus has computers with VAX access available for students, and while a significant number of students do have computers at work or home, they do not necessarily have modems. This is especially true of the non-business graduate students. Long distance phone call charges are also a factor; will students pay toll charges to do their own searching? Students had previously made toll calls to access the online catalog from home, but searches of CD-ROM databases and other resources would prolong the time they stayed online. The MBA program at the Gainey campus has offered to share its toll-free line with the library - if the library shares the cost - but this still does not help students dialing in from home or work. The graduate program administrators must take responsibility for insisting upon at least one public VAX terminal at each satellite campus.

Students must also have an individual VAX account; for security reasons, the Computing Center does not allow "library accounts" which anyone could use. Unfortunately, the Computing Center has made it difficult for off-campus students to obtain, and keep a VAX account. Accounts are to be applied for in person during business hours on the main campus. We have had success at our Minneapolis branch campus with a request slip for VAX accounts where the librarian verifies the person's identity and sends the request on to the Computing Center. In a week's time, the student calls the Computing Center and is issued a user name and password. This practice has not been as successful at the other sites where there is not a librarian present.

The Computing Center staff also maintains the right to make students renew their accounts each term. While one can understand their concern about unused accounts taking up storage space, it will take off-campus students at least a week to get lapsed accounts renewed. Someone could take responsibility for making sure that all off-campus students get their renewals each term, but who should that be - the librarian? the graduate program staff? In the same vein, who is responsible for making sure all students have barcoded student IDs which are necessary for online book checkouts and holds?

There is not an overarching graduate school at the University of St. Thomas; there are three very autonomous graduate schools, and programs within those schools also have varying degrees of autonomy. Without a central authority to mandate procedures, it is hard to ensure that all students have the appropriate authorizations (student I.D. number, VAX user name and password) to utilize the virtual library.

TECHNOLOGY

The technology itself also presents some problems. While there will eventually be 100 ports available on-campus for users of the InfoServer, there will only be four ports available for remote access. These four ports will have to be shared by the off-campus students with all other users from the main campus accessing the system from his/her home or office. The extension librarian has also determined that scanner technology is not yet satisfactory for document delivery. Scanned text needs a great deal of editing, the scanner can't handle tables, graphs, or small numbers (i.e. census data), and consequently, the time involved is not at all cost effective.

TRAINING

Training is an important issue. Lots of documentation is needed; there is a different way to get into each service, and each service has a different user interface. The Computing Center has documentation for the VAX system and the Internet, and the library produces some for the online catalog and the

InfoServer, but the material is geared toward on-campus undergraduate students, faculty, and staff. Although the extension librarian knows that the off-campus students need a specialized packet of documentation, she has not had the time to create it.

Workshops allows the opportunity for the "tell, show, and do" process, but are time consuming to plan, and not always feasible. The education site may not have the facilities or equipment needed, and adult learners are loathe to attend events outside of scheduled class time. The extension librarian scheduled a workshop for the students at our Chaska campus demonstrating access to, and use of, the virtual library in the spring of 1993. The workshop had to be held at another campus with a computing lab, but five students did sign up. The extension librarian put in a lot of hours arranging for the workshop site, and preparing the workshop script and materials. Unfortunately, not one student showed up for the workshop.

Telephone support requires less preparation time, but is staff intensive. Again, who will take responsibility? Currently at UST, the librarians take care of search strategy questions, and the computing center hardware and software queries. The extension librarian has developed a directory of computer and library phone numbers for technical and search support to distribute to the students. One issue that still remains is the hours of availability for telephone support.

THE ROLE OF THE CAMPUS COMPUTING CENTER

The relationship between the library and computing center has a great influence on the success of the virtual library. At the University of St. Thomas, the Computing Center is not used to working with off-campus students and programs, and the satellite campuses are step-children in terms of computing equipment. The Computing Center also maintains a very rigid division of responsibilities. One person is in charge of VAX accounts, another for documentation, another is the guru of the Internet. This can prove very frustrating when you are starting out, and don't know who to talk to.

The Computing Center staff, while very knowledgeable and professional, are not conversant in library technology. Many delays have occurred simply because of misunderstandings concerning library systems and library applications of campus computer systems. Thankfully, the UST Libraries will have an Electronic Resources Librarian on staff beginning in July 1993 who will assist in implementing library systems, and serve as the library/computing center liaison.

CONCLUSION

Setting up a virtual library was more complicated than it seemed. The technology involved is so new that no one - librarians or computing professionals - has a clear idea of how to implement it. Learning what might work, and what won't is time-consuming. Most librarians are not technically astute enough to be able to handle such projects; without adequate support from the campus computing professionals, things go awry. Not only are there a multitude of systems to introduce, but we are often not well-trained enough ourselves on those systems to train others. How many of us have surfed the Internet enough to feel competent enough to teach others about it? (Tenopir 1993)

The staff of the University of St. Thomas Libraries still has high hopes of using a virtual library to provide off-campus students with access to resources. Our new Electronic Resource Librarian should be able to provide us with the technological expertise necessary to overcome some of our technical problems. An increasing emphasis on off-campus programs, slimmer implementation budgets, and tougher accreditation standards will bring our efforts to the attention of the administration as a way of providing quality service at a relatively low cost. (One virtual collection is surely less expensive that four or five site-based collections.) While the virtual library will entail more work on the part of the extension librarian in regards to training and user support, it will put more responsibility on the students themselves for research and document delivery, and eventually free the librarian to create new visions for the next age of extension library services.

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